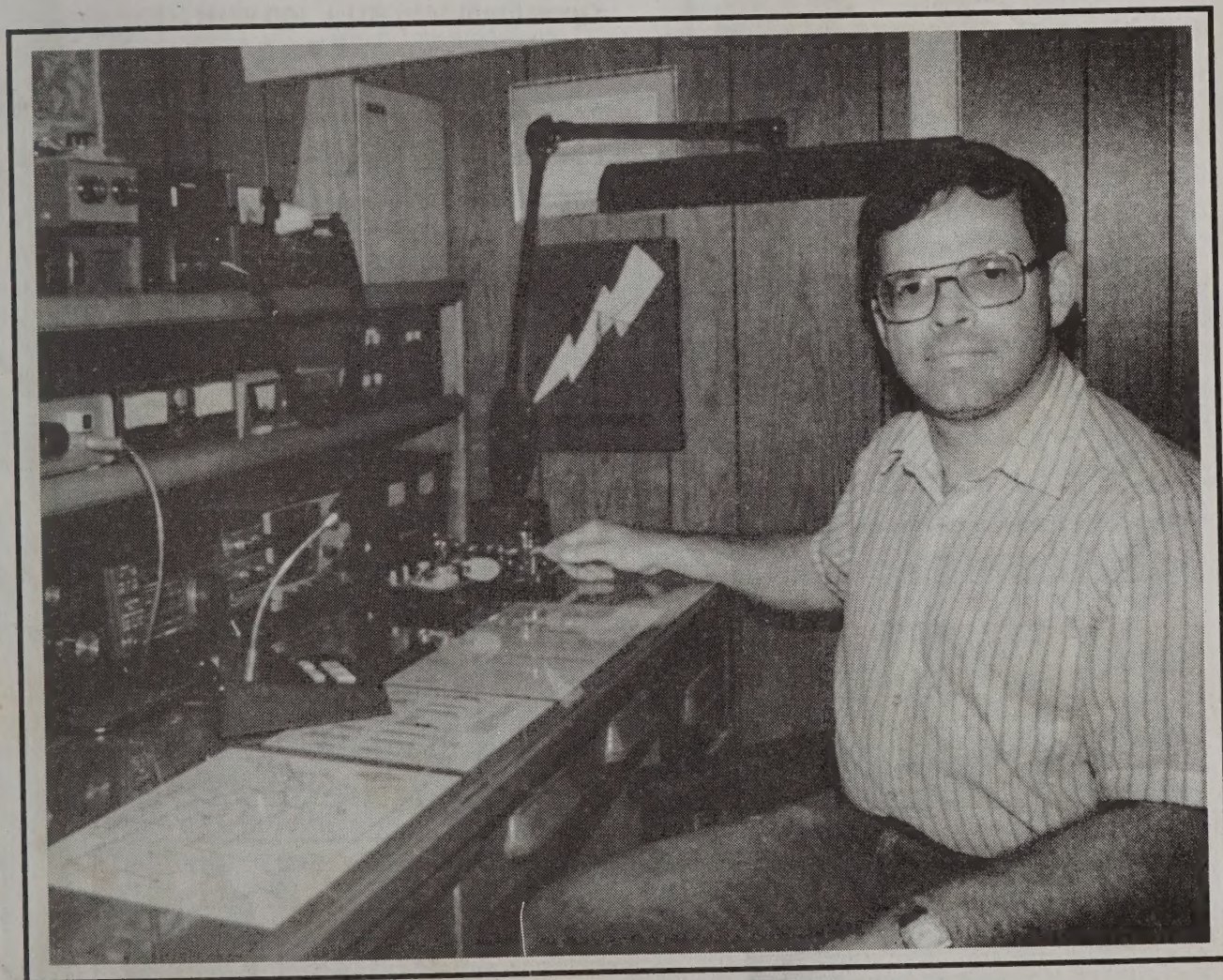




The Official Journal of the Foundation For Amateur Radio, Inc.

JUNE 1996



**FCC Highlights • ARRL Report • VE Exams Schedule
Public Service Report • DX Column • Regional Hamfests
Club Reports • Shack Sales • Much More!**



\$1.00



ELECTRONIC EQUIPMENT BANK

323 Mill St, N.E.
Vienna, Va. 22180

BBS: 703 938 3781

Email: eeb@access.digex.net

Web: www.digex.net/eeb/eeb.html

FT-3000 M

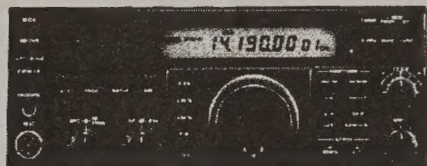
The Latest YAESU

- 70 Watt in Car/ at Home • Wide Rx
- New Display

NOW
AVAILABLE
\$489.95



YAESU FT 840



With Yaesu in store instant
Qpon (until May 31) • 100 Watt HF
NOW \$799



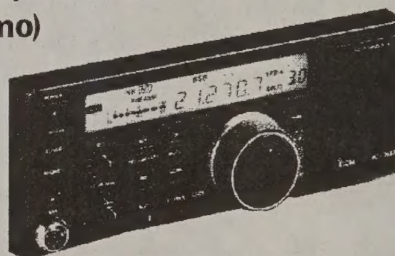
Yaesu Mil-Spec FT-10

2 mtr Now with Qpon
2 Watt A06 - **\$185.00**
5 Watt A06 - **\$205.00**

*"Ask the boys at the
counter about theirs!"*

ICOM IC-707

100 Watt HF, Compact XCVR
2 left at **\$696.95**
(1 is demo)



LOWE HF150

- Portatop
- .30 - 30 MHz
- All Mode w/ sync



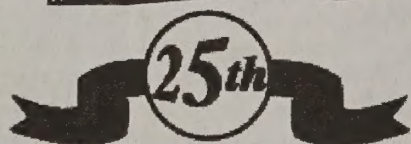
NOW
\$519.95



ICOM ICT22

118 - 175 Rx
NOW \$238.95

*"NO other HT at
this Low Price!"*



Anniversary

*"YES...We take CLEAN
trade-ins - Call us!"*

NEW YAESU FT-50 HT

MIL Spec, Yaesu's newest dual
band transceiver

2W **\$326**

5W **\$349**

+ Wide Band RX



ORDER 703 938 3350



In this month's issue . . .

Regular & Special Features:

Editor's Corner	5
FCC Highlights	7
ARRL Report	11
Elmer's Corner	14
DX DX DX	15
Examination Schedules	22
Shack Sales	59

Club Columns:

Amateur Radio Research & Development . . .	29
Anne Arundel Radio Club	29
Antietam Radio Association	30
Arlington Amateur Radio Club	35
Baltimore Amateur Radio Club	36
Capital City Amateur Radio Society	37
Columbia Amateur Radio Association	38
Digital Mid-Atlantic Radio Council	38
Dept. of State/Voice of America	40
Frederick Amateur Radio Club	41
Green Mountain Repeater Association	41

Hanover Area Hamming Association	42
Herndon Repeater Group	42
Historical Electronics Museum ARC	43
Laurel Amateur Radio Club	44
Loudoun Amateur Radio Group	44
MADRAS	45
Maryland FM Association	46
Maryland Mobileers Amateur Radio Club	48
Metrovision Amateur TV Club	49
Mount Vernon Amateur Radio Club	50
National Capitol DX Association	50
Prince George's Wireless Association	51
QCWA Shenandoah Valley Chapter #137	52
Shenandoah Valley Amateur Radio Club	53
Southern Maryland Amateur Radio Club	54
T-MARC	55
Valley Amateur Television Society	55
Vienna Wireless Society	56
Waldorf Repeater Support Group	56

Foundation Officers . . .

Foundation President

Chuck Sommer, N40SD, (301) 249-6544

Executive Vice President

Al Brown, WA3FYZ, (301) 490-3188

Vice President

John Chitwood, K3RGB, (301) 799-7360

Vice President

Mary Morris, N4TCI, (703) 971-3905

Vice President

Hugh Turnbull, W3ABC, (301) 927-1797

Vice President

Tony Young, WA3YLO, (301) 262-1917

Treasurer

Charles Johnson, N3HFO, (301) 552-1251

Recording Secretary

V. Gigante-Hueber, KA3PVS, (301) 249-2609

AUTO-CALL Magazine Staff . . .

Editor

John Queen, KAØSEY, (301) 855-0198

Circulation Manager

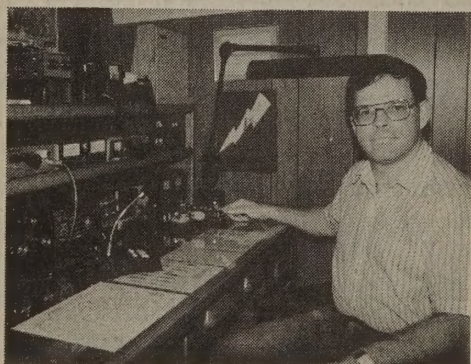
John Swafford, W4HU, (703) 536-9537

AUTO-CALL Copyright ©1996. Deadline for copy is the 1st day of each month prior to the month of publication. All contributions are welcomed, but the editor reserves the right to edit or reject any material submitted. Permission is hereby granted to reprint from this publication provided credit is given. AUTO-CALL is published monthly as the Official Journal of the Foundation for Amateur Radio, Inc. Comments made by columnists do not necessarily reflect the opinions of the Foundation. No effort is made to investigate advertisers, therefore no warranty can be implied. Entered as third class non-profit matter at the Arlington, Virginia Post Office. Subscription rate is \$8.00 per year.

Regional Hamfests and Other Events

May 31 - June 2	Rochester Hamfest - Rochester, NY
May 31 - June 1	Atlantic Division Convention - Rochester, NY
June 2	Manassas Hamfest, Manassas, VA
June 2	Breezeshooters - Butler, PA
June 8	Champlain Valley ARC, Plattsburgh, NY
June 9	Central PA - Winfield, PA
June 9	Lancaster ARC - Darien Center, NY
June 9	Hanover Hamming Assn - Hanover, PA
June 15	Skyline ARC - Cortland, NY
June 16	Frederick Father's Day Hamfest, Frederick, MD
July 4	Harrisburg RAC - Bressler, PA
July 7	Murgas Amateur Radio Club, Dallas, PA
July 13	Columbia Area ARC - Lancaster, PA
July 14	Mid-Atlantic Amateur Radio Club, Kimberton, PA
July 14	North Hills ARC - Pittsburgh, PA
July 20	Jonestown Mtn Repeater Assn
July 20	Utica ARC - Frankfort, NY
July 21	Indiana County Amateur Radio Club, Indiana, PA
July 27	Columbia Montour Amateur Radio Club, Eerwick, PA
July 28	BRATS - Timonium, MD
July 28	Genesee RA - Batavia, NY
July 28	Mid-Atlantic DX & Repeater Assn., Brunswick, MD
August 4	Delaware-Lehigh ARC - Easton, PA
August 4	Winchester Hamfest
August 4	Berryville Hamfest, Berryville, VA
August 12	Tompkins Co. ARC - Dryden, NY
August 15/18	International EME Convention - Bowie, MD
August 18	Sussex ARA/Delmarva - Georgetown, DE
September 7	Radio Assn of Erie - Erie, PA
September 8	Foundation for Amateur Radio FAR Fest

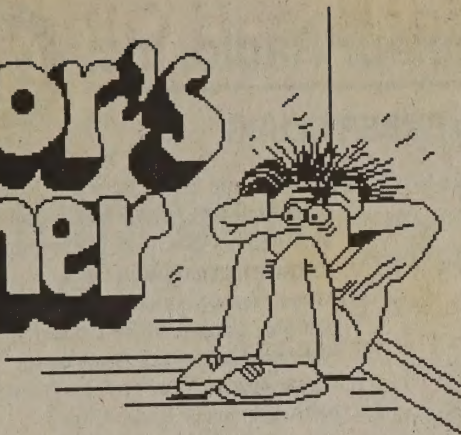
On The Cover



Pictured on this months' issue of AutoCall is Joe Nunemaker, KD3VR. Joe has been selected as the Foundation for Amateur Radio Ham of the Month for June 1996. Joe has been very active with the Green Mountain Repeater Association the past 10 years and is currently on the board of directors and serving as President of GMRA. More info about Joe can be found on page 19 of this issue. Congratulations, Joe on being selected Ham of the Month!

Editor's Corner

By John Queen
KAØSEY



When I was a young and naive amateur radio operator 12 years ago, I was anxious to participate in any ham related function or event. Shortly after becoming a harn, I was told that "Field Day" was coming up, and was asked if I'd like to participate.

Now, for those of you that have spent any time in the military, you know that "field day" pertains to a day long exercise of thoroughly cleaning up the barracks, shop, or whatever. So that's what I thought I was volunteering for. All I knew was that this so called "Field Day" was going to take place on a weekend, and that the club would be operating three stations. "Three stations", I thought to myself. That must mean that they've organized the cleaning into three areas. Needless to say, when that weekend rolled around, I showed up with buckets, brushes, and soap. Boy, was I washed up!

Hams who have been around for awhile assume that new hams know everything they do. We simply assume too much. And we all know what happens when we ASS-U-ME something!

For example, I typically receive several phone calls each month from hams looking for directions to various hamfests or other events. Unless I have been provided information from the club with locations, directions, etc., I am helpless to assist these hams, other than perhaps provide them with phone numbers of hams or clubs who might know.

Amateur radio clubs tend to assume that everyone knows where their hamfest is held. Talk-

in frequencies are great, but they only work for hams who have radios. Catch a clue folks, many newly licensed hams don't have a radio yet! (Perhaps that's why they're going to the hamfest in the first place, to buy one! Duh...)

Recently, I received a phone call from a frustrated new ham who had great difficulty finding a popular Virginia hamfest. On the day of the hamfest he called the police department hoping they might know. They didn't. (In fact the police had received 3 or 4 calls that day from other hams asking the same question.) Only by coincidence did he run into another ham at a gas station who was able to lead him to the right destination.

Lesson learned? Be supportive of new hams. They are, after all, the future of ham radio. Don't assume that they know where your event will be held. And don't assume that they have the capability of finding out either! When sponsoring a ham radio event, make sure that you 'get the word out' far in advance, and with plenty of clarity. Remember, FAR member clubs are authorized to publish, free of charge, one full page each year in *AutoCall* to promote their hamfest or event.

As a side note, remember that Field Day is coming up the last weekend of June in a field near you. It's a great opportunity for new hams to get involved in contesting and HF operations. Now where did I leave that bucket and brush?...

73's, de KAØSEY, John



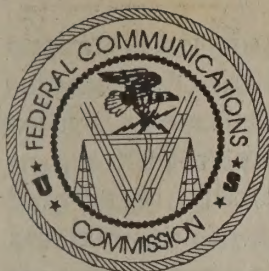
MEMBER CLUBS

Adams County Amateur Radio Society
Alexandria Radio Club
Amateur Radio Research and Develop. Corp.
AMSAT - Radio Amateur Satellite Corporation
Anne Arundel Radio Club
Antietam Radio Association, Inc.
ARINC Amateur Radio Club
Arlington Amateur Radio Club
Baltimore Amateur Radio Club
Baltimore Radio Amateur Television Society
Capital City Amateur Radio Society
Capital Hill Amateur Radio Society
Carroll County Amateur Radio Club
Central Maryland Amateur Radio Club
Chaverim of the Greater Washington Area
Columbia Amateur Radio Association
Culpeper Amateur Radio Association
D-MARC - Digital Mid-Atlantic Radio Council
Department of State Amateur Radio Club
Explorer Post #80 - Amateur Radio
Fauquier Amateur Radio Association
Frederick Amateur Radio Club
Frederick Amateur Repeater Group
Goddard Amateur Radio Club
Green Mountain Repeater Association
Herndon Repeater Group
Historical Electronics Museum Amateur Radio Club
IBM Amateur Radio Club
Johns Hopkins University APL ARC
Kent Island Amateur Radio Club
Laurel Amateur Radio Club
Leisure World Amateur Radio Club
Loudoun Amateur Radio Group
MD/DC MARS (Navy Marine) Association
MADRAS
Maryland Emergency Phone Net
Maryland FM Association
Maryland Mobileers Amateur Radio Club
Mercury Amateur Radio Assn., NE Area
Metropolitan Communications Network
Metrovision Amateur TV Club
Mid-Atlantic DX & Repeater Assn.
Montgomery Amateur Radio Club
Montgomery Auxiliary Communications Service
Moose Amateur Radio Club
Mount Vernon Amateur Radio Club
National Capitol ARES Council
National Capitol DX Association
Naval Research Laboratory Radio Club
NOAA Amateur Radio Club
North Point FM Association
Northern Virginia FM Association
Northern Virginia Radio Club
Ole Virginia Hams Amateur Radio Club
Opequon Radio Society
Pentagon Amateur Radio Club
Potomac Area VHF Society
Potomac Valley Radio Club
Prince George's Wireless Association, Inc.
Prince George's County ARES/RACES
Quarter Century Wireless Association, Inc.
 Baltimore Chapter #20
 Del-Mar-VA Chapter #150
 Shenandoah Valley Chapter #137
 Vic Clark Chapter #91
 Washington Chapter #23
Rock Creek Amateur Radio Association
St. Mary's County Amateur Radio Association
Shenandoah Valley Amateur Radio Club
Southern Maryland Amateur Radio Club
Southern Patuxent Amateur Radio Club
Stafford Amateur Radio Assn.
Sterling Park Amateur Radio Club
Summit Amateur Radio Association
Tri-County Amateur Radio Club
T-MARC, Middle Atlantic Repeater Council
Vienna Wireless Society
Voice of America Amateur Radio Club
Waldorf Repeater Support Group
Washington Adventist Amateur Radio Assn.
Washington Area Young Ladies ARC
Woodbridge Wireless, Inc.

NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. **Visitors are always welcome!** The next meeting will be held on June 12th in Takoma Park, Maryland at Columbia Union College, HMS Richards Bldg., Flower Avenue (Take beltway exit 30, South on Colesville Road to Franklin Avenue, left on Franklin to Flower, right on Flower to Carroll Ave., left on Carroll to Greenwood Ave., left on Greenwood to 2nd building on left.

**Talk-in on
146.55**



FCC Highlights

By Jack Kelleher.
W4ZC

FCC DROPS PILOT RFI PROGRAM

The FCC has quietly ended a pilot program in Tampa, Florida, that referred consumer-electronics interference cases to a local repair shop for resolution. Jim Dailey, the FCC engineer in charge in Kansas City and head of the FCC's privatization task force, says the FCC's data showed the program "had no takers" because the complainants did not want to spend money to eliminate the interference.

Fear was another reason, says Roy Lewis, W4WLY, whose Vulcan Electronics in Tampa was the only shop certified by the FCC (from August 1995 until February 1996) to deal with interference problems. Lewis reports that all of the approximately two dozen complaints of RFI to televisions, stereos, telephones and even air conditioners, stemmed from unlicensed, high-power operations that the customers already had identified. He said the customers not only didn't want to pay to have the problems resolved, "they were afraid of retaliation if I went out there."

In an April Public Notice, the Commission said it cannot resolve most of the thousands of complaints of interference to TVs, radios, stereos and televisions "because the cause of this interference is the design or construction of these products and not a violation of any FCC rule." Resolving interference problems will be the responsibility of manufacturers and consumers, Dailey said. "We are separating the issue of interference from the issue of compliance. We are not in the television or telephone repair business." Dailey said consumers who buy an electronic

device "have a presumption that it ought to work when they buy it."

The FCC's Telephone Interference Bulletin encourages consumers experiencing telephone interference to write equipment manufacturers, and it even provides a sample complaint letter to make it easy.

Lewis said the consumers complaining about RFI problems believe the government should do something about it. Extremely high-powered 11-meter operations are common in the Tampa area, Lewis reports. He said the scofflaws often cascade several illegal power amplifiers to obtain extremely high power levels, and he'd like to see the FCC beef up enforcement, "at least in metro areas." In the same Public Notice, the Commission emphasized that its Compliance and Information Bureau "will continue to take appropriate enforcement action where it has been determined that the interference is caused by violations of the Communications Act or the Commission's rules or policies." (Ed: It's a shame that some of the money from spectrum auctions is not usable to police spectrum abuses. I wonder what the reaction would be if HF Amateurs were the alleged scofflaws?)

ARRL Lab Supervisor Ed Hare, KA1CV, says he's cautiously optimistic about the FCC's stance on interference, as reflected in the Public Notice. "I truly hope the Commission's statement represents a shift in the way the FCC will handle these matters," he said. But he noted that the FCC has not taken "appropriate enforcement action" in any of the cases referred to Lewis' shop.

Ralph Barlow, engineer in charge of the FCC's Tampa office, agrees that such illegal operators generate lots of interference complaints, but says it would take more than complaints before his office would treat it as a compliance issue. For example, a properly operating amplifier could cause telephone interference, but "it's still the telephone's problem," he suggested, until the FCC

Continued next page

has good reason to believe the interference source also is breaking the law. Then, "we would address it only as a compliance issue" and on a priority basis. "Which probably means we'd never get to it," Barlow conceded. Tracking down an offending operator can sap a lot of resources the FCC needs to apply elsewhere, he said. "We go after the worst first."

Dailey concurred that the FCC's staff is thinly spread and that other issues—primarily those involving safety—come first. After the FCC's reorganization is complete, he'll have one person for each of the four states in his region. "We have to look at what we can accomplish with the resources available to us," he said.

Hare says the ARRL will continue to cooperate with the FCC and manufacturers in cases of interference that involve Amateur Radio.

The FCC provides basic consumer information about interference problems via the Internet on the FCC Compliance and Information Bureau's home page at <http://www.fcc.gov/Bureaus/Compliance/WWW>. (The list also is available through the Commission's Fax on Demand service at 202-418-2830. Request document 6904.) Documents available for viewing and downloading include the Interference Handbook and the Telephone Interference Bulletin. The Interference Handbook includes a list of equipment manufacturers who provide specific assistance with interference problems.

The ARRL makes available several RFI-information packages through its Technical Information Service. Specific packages are available for interference to TV, cable, VCRs, telephone, computer and audio equipment as well as on electrical and automotive interference. Each package costs \$2 for ARRL members and \$4 for non members, postpaid. Write to the ARRL Technical Department Secretary, 225 Main St, Newington, CT 06111. Most are also available on the Hiram BBS (860-594-0306) or the ARRL FTP site <ftp://oak.oakland.edu/pub/hamradio/arrl/infoserv/tech>. (tnx ARRL letter)

HOLD THE PHONE: H-Ts WELCOME IN OLYMPIC VENUES AFTER ALL

The latest word from Atlanta is that Amateur Radio will be welcome at the Olympics this summer after all. ARRL Southeastern Division Assistant Director Jim Altman, N4UCK, reports that ham equipment, including hand-held transceivers, is not on the list of items excluded from Olympic events. "There was some thought at one time of banning all communications devices, including cellars," Altman said. He said he had assurances "straight from the horse's mouth" that H-Ts would not be banned from Olympic venues, as had been announced earlier and confirmed by Michael Smalls of the Atlanta Committee for the Olympic Games' (ACOG) technology department.

Altman said he's been in close contact with the top security people in ACOG in his capacity as head of the ad hoc group under the ARRL umbrella that's coordinating the Amateur Radio volunteer force for the games in July, and the security heads have assured him that ham radio H-Ts—as well as CB transceivers and cellular telephones—will not be kept out and may be used in Olympic venues. Altman said not only will ham radio be allowed through the gates, hundreds of ham radio volunteers will provide "contingency communications" to support the security force's radio system. He expects to have approximately 350 ham radio volunteers.

Altman had no explanation for the earlier, contradictory announcement, but he did offer a word of caution: "ACOG's decision-making process changes daily. This is the state of affairs today," he said. "But I don't see any indication that it will change." (tnx ARRL Letter).

FCC ORDERS ARRL REINSTATED TO QPC

The Federal Communications Commission has directly ordered a private corporation to reinstate an employee of the American Radio Relay League

Continued next page

to the ham radio Question Pool Committee. It's a major victory.

A showdown that could have affected how amateur radio tests are administered nationwide appears to have been avoided. The ARRL has been involved in a dispute that began simmering last year. That's when a group of volunteer examiner coordinators incorporated what had been an informal organization. The new group became the National Conference of Volunteer Examiner Coordinators, Incorporated.

The ARRL said it would not be part of the new group, but the League's VE Department Manager, Bart Jahnke, KB9NM was made part of the new organization's Question Pool Committee. The Committee's job is to maintain question pools for amateur radio license exams administered by various volunteer examiner groups working together.

But tensions grew when Jahnke was removed from the Committee in September, an action the League charged the NC-VEC had no authority to take. In February, the ARRL asked the FCC to declare the current volunteer exam mechanism broken and to create a substitute mechanism. The NC-VEC refused to reinstate Jahnke to its Question Pool Committee, saying the League should be a Conference member if it wanted Committee representation.

But pressure grew on NC-VEC to grant the League's request with a letter from FCC Private Wireless Division Chief Robert McNamara to the Conference's President. McNamara said it's inconsistent with FCC rules for a VEC to be excluded from helping maintain the question pools because of lack of membership in the NC-VEC or any other organization. McNamara requested that the ARRL's VEC be reinstated to a seat on the Question Pool Committee immediately. On April 3rd, NC-VEC President Don Tunstill, WB4HOK, contacted Conference members, saying "Regretfully, recent events have caused me to ask you to reconsider our position." Tunstill then asked

for members to approve appointing the League's VEC to the Question Pool Committee.

Two days later, on April 3rd, Tunstill notified the FCC's McNamara that Bart Jahnke had been reinstated to the Question Pool Committee, effective immediately. The NC-VEC's reversal of its stand apparently ends a dispute that could have wound up in court. Had that happened, volunteer amateur radio license exam programs throughout the United States could have been affected. (tnx Amateur Radio Newsline)

HAMS MAY FIGHT SPECTRUM PLAN

Amateur radio may soon be fighting to retain some of its primary microwave spectrum. This as the result of FCC approval of a plan to reallocate 185 MHz of spectrum transferred from the Federal Government to the private sector. The Commission also established the scope and timing of future rulemaking proceedings to assign the reallocated spectrum.

According to reports in several communications industry publications, the Secretary of Commerce identified 235 MHz of Federal Government spectrum for private-sector use. Hams will have to fight to protect 2300-2310 MHz from being reallocated and auctioned off.

The Commission says it intends to consider all options for the appropriate use of the remaining 185 MHz, including, but not limited to, those addressed in allocating the first fifty megahertz. Public safety radio is a prime candidate for some of the reallocated spectrum. The Budget Act requires that the FCC study public safety spectrum needs and develop a plan to ensure adequate spectrum through the year 2010.

The text of this rule making procedure is not yet out, but you can expect all timetables to be very short. Because of this, all hams interested in saving the 2300 to 2310 MHz band will have to unite and move very swiftly. (Tnx Amateur Radio Newsline).

Continued next page

The FCC has said no to a rules change request that would have placed severe limitations on stations issuing ham radio news and information bulletins. The agency did so by dismissing a rules change request filed last year by ham radio publisher Fred Maia, W5YI.

The Maia petition, which had been assigned rule making number RM-8626, claimed that the high frequency ham radio bands were being overrun by bulletin stations, and that these bulletin operations were unilaterally setting up shop and causing interference to already established ham radio communications.

RM-8626 was strongly opposed by the American Radio Relay League. The ARRL viewed it as nothing more than an attempt by Maia to kill off the W1AW Official Bulletin Station at League Headquarters. However, Maia said: "Many of those people thought that I was opposed the W1AW bulletins. Nothing could be further from the truth. I've been a ham and a member of the ARRL for 40

years and a very staunch supporter of what they do."

The petition also pulled strong opposition from other sectors of the ham radio community that are involved in news dissemination. With little in the way of support the FCC decided to dismiss the Maia petition rather than let it go forward to a rule making notice. The FCC has also made clear that it will not revisit the issue again anytime in the foreseeable future.

FCC ISSUES FEMA HAM CALL SIGNS

The FCC has issued Amateur Radio call signs to the Federal Emergency Management Agency. FEMA Frequency Manager Paul Reid, N4EKW, says FEMA will use the call signs only in emergencies to communicate directly with ARES, RACES and other Amateur Radio operations.

The FEMA call signs all have the same format. For example, the Region I call sign is KF1EMA, while the FEMA Headquarters at Mt Weather in Berryville, Virginia, has been issued NF1EMA.

ARRL Announces Internet Listservers

The ARRL Atlantic Division has announced the creation of five Internet listservers for distribution of bulletins. By subscribing to the listservers of your choice, you can receive Atlantic Division bulletins of your choice conveniently and inexpensively whenever they are issued. The listservers' names and contents are as follows:

atdnews Atlantic Division News newsletter, issued three or four times a year. Mailed to club presidents and newsletter editors.

hamfest Monthly hamfest calendar update for the Atlantic Division.

patest Monthly license test bulletin for Eastern PA and Western PA Sections. Contains information for the next two months.

nytest Monthly license test bulletin for Northern NY and Western NY Sections. Contains information for the next two months.

djmtest Monthly license test bulletin for Delaware, Southern New Jersey, and Maryland/DC Sections. Contains information for the next two months.

To subscribe to a bulletin series, send an e-mail message addressed to: <list name> @bfdin.com (e.g. hamfest@bfdin.com). The title of the message is irrelevant and may be left blank. The subject of the message should simply say: SUBSCRIBE. You will receive a message back confirming your subscription. To discontinue receiving a bulletin series, address an e-mail message to the group name (e.g., hamfest@bfdin.com). The subject of your message should simply say: UNSUBSCRIBE. The system will automatically ask you every 90 days if you wish to continue subscribing. Electronic subscription to these bulletins is open to any ham who wants to get them.



American Radio Relay League Report

By John Swafford,
W4HU

The ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER provides timely news of interest to active Radio Amateurs. Any League member may subscribe to the ARRL LETTER.

ARRL WRC-99 CONFERENCE PREPARATORY COMMITTEE APPOINTED

ARRL President Rod Stafford, KB6ZV, has appointed the members of a committee to advise the Board of Directors on policies for the 1999 World Radiocommunication Conference (WRC-99). The Board established the committee at its 1996 Annual Meeting, and set its first task as defining the process by which membership input should be solicited and the opinions of the membership objectively determined.

The ARRL WRC-99 Committee is chaired by Dakota Division Director Tod Olson, K0TO. Also named to the committee were First Vice President Steve Mendelsohn, WA2DHF; Midwest Division Director Lew Gordon, K4VX; Southwestern Director Fried Heyn, WA6WZO; Northwestern Division Vice Director Greg Milnes, W7AGQ; ARRL members Ken Kopp, K0PP, of Anaconda, Montana. Tuck Miller, KC6ZEC, of San Diego, California, and Glen Whitehouse, K1GW, of Amherst, New Hampshire; and ARRL Executive Vice President David Sumner, K1ZZ.

The committee is expected to complete its work by mid-December 1996.

OL'SOL MAINTAINS A SPOTLESS REPUTATION

From solar observer Tad Cook, KT7H, in Seattle, Washington, comes the now-familiar word that solar activity remains very low. The sunspot count was zero on March 30 and 31. Over the next few weeks, Cook says we can expect solar flux to remain near 70, with possible mild geomagnetic disturbances centered around April 17.

On the air, 20 meters should be the best daytime band, but solar activity is expected to be too low to sustain much propagation on 15 meters or above.

For worldwide communication at night, 40 meters is the top choice, but the low solar activity makes this the best time of the solar cycle for 160 meters, too.

The latest projections, based on current conditions and previous solar cycles, suggest that we will be at the sunspot number minimum for the next few months. The minimum is centered around April through June of this year, with sunspot numbers in February 1997 reaching fall 1995 levels.

Previous forecasts have mentioned a 10.7-cm solar flux minimum centered around spring of 1997, but the latest projection moves that period up a bit. What it shows is a minimum based on an average flux of 72 for October 1996 through February 1997, with the flux also averaging 72 for June 1996.

Spring of 1998 should present a radically different picture. By then, the average flux will climb toward 100, and 10, 12 and 15 meters should be alive with activity again.

By April 1999, the average solar flux is projected to be 158, rising to 192 a year later! The next cycles projected to peak near the turn of the century—in August 2000.

Continued next page

LONG-DISTANCE RESCUE MISSION SUCCESSFUL

Collins enthusiast Bob Karon, AA6RK, of Encino, California, was checking out some repairs and modifications to his vintage gear around midnight March 18 when a routine evening of radio suddenly turned dramatic.

While working a Florida station using his Collins setup, Karon heard the distress call from the 44-foot Canadian yacht *Cambria*, which had run aground and was sinking in the Caribbean Sea, some 150 miles southwest of Jamaica. "The signal was weak and fading," Karon reports. "I had to hold my breath sometimes to hear it."

The *Cambria's* skipper, Kenneth Cunningham, told Karon the vessel was almost on its side and the antenna nearly in the water. When Karon discerned the vessel's position, he telephoned the US Coast Guard. The Coast Guard could not hear the *Cambria's* weak signal, but was able to contact a merchant vessel 25 miles away from the distressed craft.

Karon, a freelance musician, stayed on the air for the next three hours, the only connection between the merchant ship and the *Cambria*. "I reassured the panicky crew that help was on the way and relayed instructions from the Coast Guard and the rescue ship," he said. The merchant ship eventually was able to dispatch a lifeboat to the *Cambria* and rescued all four crew members.

Captain Robert C. Gravino, chief of the US Coast Guard's Search and Rescue Branch, cited Karon for "professionally and humanitarian actions assisting mariners in distress. A job well done." —Harvey Laidman, N6HL

AMATEUR RADIO GOES TO GRAD SCHOOL

Graduate student Bella Romain N4ILQ, of Carrollton, Georgia, has a healthy curiosity. For a while now, she's been wondering what makes hams willingly to go out of their way to help during

emergencies. Combining avocation and academe, Bella has made that question the focus of her master's degree thesis in psychology at West Georgia College in Carrollton.

"The fact that the FCC mentions public service as part of the reason for Amateur Radio's existence is obviously not the whole story," she said. "It is not easy to leave the comfort and security of a warm bed to drive out into a storm to help set up an emergency shelter."

A ham for more than 25 years, Bella speaks from some experience. Since she and her husband, Stewart, KF4WC, moved to Carrollton 13 years ago, they have become active in the public service sphere of Amateur Radio. They took a first-responder course, as well as numerous Red Cross disaster-training classes "so that if we are in the field providing emergency communications, we will be better prepared to handle any kind of emergency," she explained.

She reports her Amateur Radio club, the West Georgia Amateur Radio Society, works closely with emergency-management agencies, the Red Cross, and the National Weather Service "as the need arises." Club members worked with the Red Cross to provide damage assessments and communication following Hurricane Opal. They also helped with emergency shelter operations.

Bella says it's not easy to endure the tedium of long hours at an emergency communication headquarters, not to give up leisurely weekends and evenings to take courses to be better prepared for emergencies. She says she began to wonder "what hams experience and feel during the times they participate in providing emergency help, and what some of their thoughts and reasons were for doing this."

To find out, as part of the information-gathering phase of her research project, Bella is asking hams to fill out a questionnaire. She'll then select a number of hams for in-depth follow-up interviews. Among other things, the questionnaire delves into respondents' emergency

communication experiences and asks them to rate both their level of personal comfort and personal safety while responding during an emergency.

For more information, or to obtain a copy of the survey to complete, contact Bella Romain, N4ILQ, 285 Timber Ridge Trail, Carrollton, GA. 30117-8884; tel 770-834-5674; fax 770-830-9481 or e-mail bella@mindspring.com.

'STEPS TOWARD MORE PERFECT COMMUNICATION' EXHIBIT TO OPEN

The story of Arthur Collins, W0CXX, and the Collins Radio Company is one of genius, vision, dedication and hard work—an inspiration for anyone with an interest in radio and electronics. Starting May 4, the public will be able to get a better understanding of the man, his company and accomplishments through an exhibit, "Steps Toward More Perfect Communication," at the Linn County History Center in Cedar Rapids, Iowa, where Collins was headquartered.

The exhibit will point up the value of Collins Radio Company and Art Collins to the local area and the world between 1923 and 1969. The exhibit is designed to impart to visitors—especially youth—a sense of the values and tenacity Art Collins exemplified, and how—through hard work and application of knowledge—dreams can be realized.

Photographs, print materials, equipment displays, audio recording of historic radio transmissions and other historical memorabilia will tell the Collins story, which is broken down into several exhibit topics. These include Teenage Wizard, 1925-1930; A Business from a Hobby, 1931-1933; Radios for Soldiers; World War II; Post-War Diversification (which chronicle the company's Amateur Radio, broadcasting, avionics, military and computer efforts); To the Moon in a Volkswagen and the Legacy Lives On.

The exhibit draws on the resources of retired Collins Radio Company and Rockwell Collins employees, the Collins Museum at the Rockwell

Collins facilities in Cedar Rapids. The Collins Collectors Association, The Cedar Valley Amateur Radio Club, the Collins Amateur Radio Club and the book, *The First Fifty Years*, by Ken C. Braband.

The exhibit draws its name from a statement of Art Collins, then age 16, in *Radio Age* magazine for May, 1926;

The real thrill in amateur work comes not from talking to stations in distant lands, nor from receiving multitudes of QSL cards from all the world, although these are things to stir your imagination, but from knowing that by careful and painstaking work and by diligent and systematic study, you have been able to accomplish some feat or establish some fact that is a new step toward more perfect communication.

The Linn County History Center is at 101 Eighth Ave SE, Cedar Rapids. The exhibit will remain opened 10 AM to 4 PM Tuesdays through Saturdays until February 15, 1997. —*Rod Blocksome, K0DAS*

MILTON E. CHAFFEE, W1EFW, SK

Past New England Division Director Milton E. Chaffee, W1EFW, of Southington, Connecticut, died April 8, 1996. Milt was 83. He served as director from 1957 through 1964. Milt was a longtime ARRL member and official, and served in many League capacities, including assistant section manager and section traffic manager in Connecticut. He was an active CW and traffic enthusiast. He also served on the QCWA board of directors.

Connecticut Section Manager Betsey Doane, K1EIC, called Milt's passing "the end of an era." ARRL Executive Vice President David Sumner, K1ZZ, added: "Milt was a stalwart traffic handler who set and maintained the standards for the rest of us for more than 40 years."

A memorial service for Milt Chaffee was held April 14 in Southington, Connecticut.



Elmer's Corner

By Paul E. Wilkins,
AB4CY

AN INVENTION OF NECESSITY

I was reminded a while ago of the interesting story of the "invention" of the Cubical-Quad antenna design. It seems that a group including several hams, notably C.C. Moore, W9LZX, made a journey to Quito, Ecuador in 1939 to install a new short wave missionary broadcast station, HCJB. It was to operate in the 25 meter band on AM at a transmitted power level of 10Kw.

To direct a strong signal to the central USA, the group designed a high Q four element dipole parasitic array. In 1939 this wasn't yet commonly called after it's inventor, a Yagi.

Now Quito is in the Andes Mountains at an altitude of about ten thousand feet where the air is pretty thin. So thin in fact that when they first fired up the rig at full power, great sparks and a thick corona formed at the ends of the dipole elements.

There was so much power dissipated from the ends of the antenna that the metal glowed red hot and melted the Aluminum so that blobs fell to the ground below.

The corona also broadcast the audio all over town. Now, you'll remember that at the end of a dipole the power ($P=E*I$) appears as a lot of voltage since the current is reduced to zero. This is why "winkers" worked. They are those little neon bulbs guys attached to the end of a dipole that would light up (at about 80 Volts) and wink when you keyed the rig.

At Quito, they attached copper toilet tank balls to the end of the dipole elements to reduce the field

strength. They helped but not enough and besides they detuned the elements. This is where the invention process settled in as a necessity. How to solve the problem.

The process began by looking at the folded dipole which is two half wave dipoles separated by a small distance with their ends connected together.

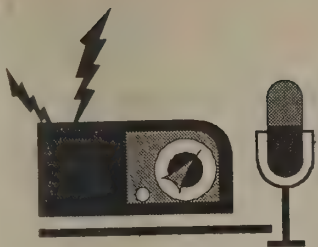
What would happen if the dipoles were pulled apart in the center into a diamond shape? Not much. It was still a dipole but it had a lower Q and hence a wider bandwidth and a somewhat higher radiation resistance but no gain.

Then came the break-through, why not make it into a square, a quarter wavelength on a side. This was a full wave loop that didn't have any "ends" to produce high field strength and the two quarter wave sections at the top and the bottom acted as a stacked quarter wave beam with gain as well! Neither did it require Aluminum tubing which wasn't all that easy to come by in 1940.

When the antenna was built and installed it seemed to fill the bill, no sparks, good directivity and more that sufficient gain. In fact W9LZX was granted a US Patent on the design because it radiated broadside to the plane of the loop.

The antenna was physically smaller than a Yagi, could be fed from the bottom or the side by either a coax or open wire line to provide either horizontal or vertical polarization. It turned out to be "quiet" on receiving and did not respond to rain static in the way the a Yagi did. You can add reflectors and directors or nest several loops on the same support for multi-band use.

Today you find quads used a lot at VHF and UHF. A peek at the Antenna Handbook shows numerous designs. There are those bamboo pole versions that carry nested 10,15, and 20 meter quads that look a little like spider webs. Now when you see one you'll have a better appreciation for what we know as the Cubical-Quad.



DX DX DX

By John Kanode,
N4MM

SPECIAL CALLSIGNS

The FCC has approved special commemorative Olympic callsigns for Amateur Radio Operators operating within the state of Georgia during the period of April 15 to August 31, 1996. Any amateur operating within the state of Georgia with a 4 in their callsign may replace it with a 96 or 26.

Amateurs with any number in their callsign who are operating within the state of Georgia may add 00 to the existing number. Foreign stations operating under a reciprocal permit within the state of Georgia may sign in the usual format but with a /W96, /W26 or /W400. The FCC has granted several requests for IX1 callsigns. 52 IX1 W6 and K6 callsigns have been granted for use in the WRTC which will take place during the IARU Contest in July. K3C has been granted for use by the North Shenandoah DX Association for the special event at the Kennedy Center in September.

While the trend has been for short callsigns, it appears that in Europe the long callsign is making a comeback. Recently worked callsigns such as HGM0TYP, OEM4CSK, EO150WLP and Z350GBC have appeared on 20 meters in the past few months.

During the US Constitution bicentennial celebration back in 1987 and 1988, selected stations were granted the use of 200 in their callsigns. N200MM was used by the NCDXA and W200RKC was used by the SVARC for a one week period. In 1976, stations were allowed to replace their prefix with a prefix starting with A. WA's could use AA, WB's could use AB, W's could use AC and K's could use AD. This was long before

the present callsign system was in effect. No A? prefix calls were in existence at the time.

UPCOMING DX CONTESTS

WW South American CW	June 8-9, 1996
TOEC WW Grid CW	June 8-9, 1996
All Asian DX Contest CW	June 15-16, 1996
RSGB Summer 1.8 MHz	June 22-23, 1996

TIDBITS

VK0WH operating from Macquarie Island is active on Mondays, Tuesdays and Thursdays from 0700 to 1000Z. He transmits on 7009 KHz and listens 3 to 4 KHz up. QSL for this station goes to VK9NS, Jim Smith. Beware of Slims.

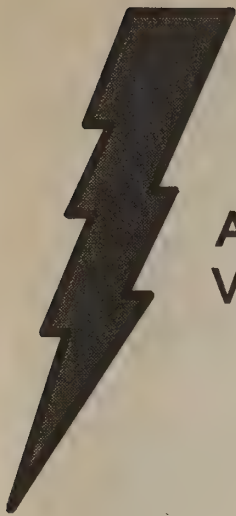
If you worked 5AITV back in the 1965-1968 time frame and still need a QSL card, you can send a SASE to W7WQR, Dave Hutchinson. He still has his logs for that operation.

70, Yemen. It has been reported that F6EXV, Paul is working with the authorities there to get permission to operate. More as things develop.

As of April 27, no PS operations have been reported. Several groups are planning to go there but the chances of any legal operations are very slim. The situation in North Korea is not good and a bit unstable. An IARU Region 3 team is working with the authorities there to set up a permanent Amateur Radio station and offer training for HF operations. It will be slow going on this one.

Several of the new M UK prefixes have been showing up on the bands and creating pileups. This will go away as they become more abundant. It has been reported that the IK prefixes have all been issued and that the PTT in Italy will start issuing IZ prefixes soon.

The International Marconi Day appears to have been a big success. Many stations using callsigns ending in IMD were worked during this event. There is a special award available if you worked 15 or more of them.



News Flash!

AMATEUR STATION VANITY CALL SIGN SYSTEM FILING GATE 1 OPENS MAY 31, 1996

Amateur operators who meet the following eligibility standards may request a vanity call sign on or after May 31, 1996. File your request on FCC Form 610-V. Legibility is critical!

If the information on your application is not legible, you could experience a delay in processing, lose the opportunity to obtain a requested call sign or even obtain a call sign different from what you want.

You must hold an unexpired amateur operator/primary station license grant of the proper operator class, as described below, to request a vanity call sign for your primary station.

To request a vanity call sign for a club station, you must also hold an unexpired club station license grant listing you as the license trustee. Refer to the licensee data base to verify that the call sign you are requesting is not already assigned.

A call sign is normally assignable two years following license expiration, surrender, revocation, set aside, cancellation, void ab initio, or death of the grantee. See Fact Sheet PR5000 Number 206-V AMATEUR STATION VANITY CALL SIGN SYSTEM. For explanations of Groups A, B, C and D and the geographic Regions, see Fact Sheet PR-5000 #206, AMATEUR STATION SEQUENTIAL CALL SIGN SYSTEM.

REQUEST BY FORMER HOLDER (PRIMARY STATION)

For your primary station, you may request a call sign that was previously assigned to your primary, secondary, repeater, auxiliary link, control, or space station. When so requesting for your primary station:

- You may request your former call sign even though it has been unassigned for less than two years. The two year requirement does not apply to an otherwise eligible primary station if the call sign was previously assigned to a station of the requestor.

- You do not have to hold a class of operator license required for the Group (A, B, C, or D) for the call sign requested. A call sign request by former holder may be from any Group in the sequential system.

- Your mailing address does not have to be in the Region designated in the sequential system for the call sign requested. A call sign requested by a former holder may be in any Region.

REQUEST BY CLOSE RELATIVE OF FORMER HOLDER NOW DECEASED (PRIMARY STATION)

For your primary station, you may request a call sign that was previously assigned to the primary, secondary, repeater, auxiliary link, control, or space station of your now-deceased spouse, child, grandchild, stepchild, parent, grandparent, stepparent, brother, sister, stepbrother, stepsister, aunt, uncle, niece, nephew, or in-law. When so requesting for your primary station:

- You may request the former call sign of a close relative now deceased even though it has been unassigned for less than two years. Upon the death of the holder, a call sign is assignable immediately to an otherwise eligible primary station of a close relative.

Continued next page

- You must be an Amateur Extra Class operator to request a Group A call sign.

- You must be an Amateur Extra or Advanced Class operator to request a Group B call sign.

- You must be an Amateur Extra, Advanced, General, Technician Plus, or Technician Class operator to request a Group C call sign.

- You must be an Amateur Extra, Advanced, General, Technician Plus, Technician or Novice class operator to request a Group D call sign.

- Your mailing address does not have to be in the Region designated in the sequential system for the call sign requested. A call sign requested by a close relative of former holder now deceased may be in any Region.

REQUEST BY FORMER HOLDER (CLUB STATION)

For the club station for which you are the license trustee, you may request a call sign that was previously assigned to that station. When so requesting for a club station:

- You may request your club station's former call sign even though it has been unassigned for less than two years. The two year requirement does not apply to an otherwise eligible club station if the call sign was previously assigned to the club station for which the requestor is the license trustee.

- You do not have to hold a class of operator license required for the Group (A, B, C, or D) for the call sign requested. A call sign request by former holder may be from any Group in the sequential system.

- Your mailing address does not have to be in the Region designated in the sequential system for the call sign requested. A call sign requested by a former holder may be in any Region.

A \$30.00 fee is required with your FCC Form 610-V application. Payment of fees may be made by check (payable to "FCC"), bank draft, money order or credit card.

If paying by credit card, you must also complete and submit FCC Form 159 with your FCC Form 610-V. (Do not send cash.) Send your application package to:

Federal Communications Commission
Amateur Vanity Call Sign Request
P.O. Box 358924
Pittsburgh, PA 15251-5924

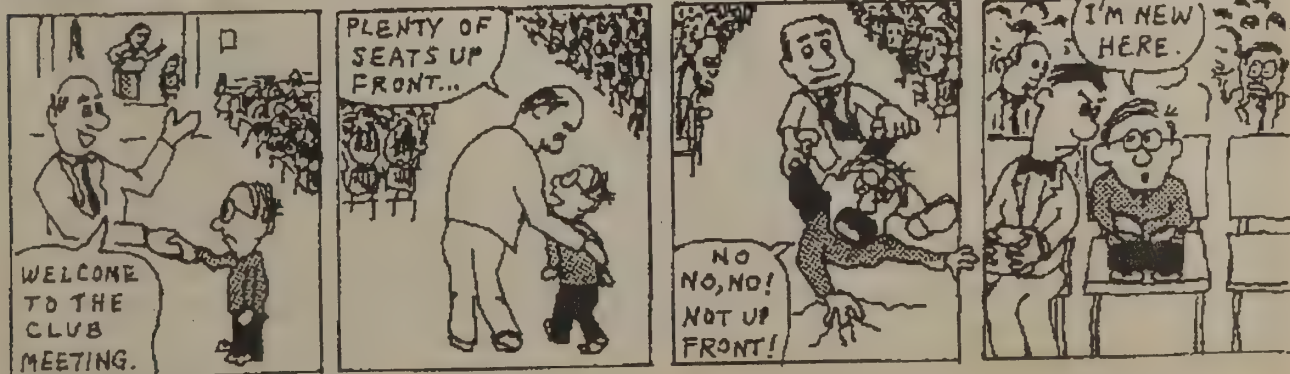
If you do not qualify under the above eligibility standards, your application will be dismissed.

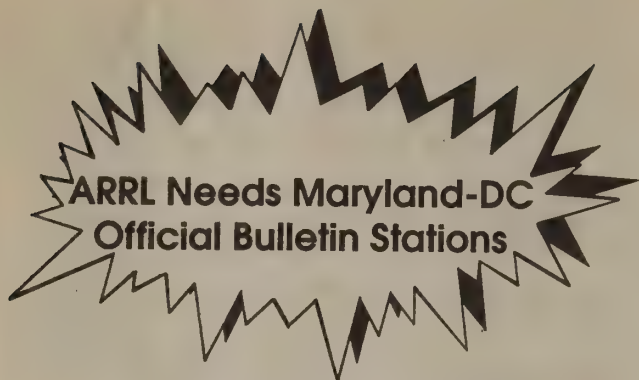
A future public notice will announce Gate 1A which will have expanded eligibility standards.

For further information, contact the Consumer Assistance Branch at 1-800-322-1117.

ELMER

By Rich Regent, K9GDF





by E. Allen Brown - WA3FYZ

As the newly appointed ARRL Maryland-DC Section Bulletin Manager (BM), one of my duties is to recruit new Official Bulletin Stations (OBS's) — volunteers who will relay information from the ARRL to the amateur radio community in a timely fashion.

"Official Bulletins" may be copied off the air directly from W1AW via CW, Voice or RTTY/ASCII, from local packet BBS's or from the ARRL Internet list-server. The object is to get current, important amateur radio related news to all amateur radio operators.

An OBS may relay bulletins by any means. For example, via announcements on CW, Voice or RTTY/ASCII on HF/VHF/UHF nets, reposts on packet BBS list-servers or oral announcements at club meetings. The choice is up to the individual OBS.

Requirements for an OBS are:

1. Must be an ARRL member.

2. Must have a novice class or higher license.

3. Dissemination of ARRL bulletins must be made several times per month to maintain appointment.

4. Need to submit monthly activity reports to the Bulletin Manager indicating bulletin retransmissions made and need to update the Bulletin Manager of any OBS-related activities. This report can be made by a formal ARRL Form FSD-210 or by an informal snail-mail letter, packet message or e-mail to the Bulletin Manager.

5. Involvement in serving the public and recruiting new amateur radio operators.

If you live in the ARRL Maryland-DC Section and would like to volunteer to be an Official Bulletin Station or desire more information, please contact:

ARRL MDC Bulletin Manager
E. Allen Brown - WA3FYZ
8645 Tower Drive
Laurel, MD 20723-1244

Packet: WA3FYZ@ WA3TAI.MD.USA.NA
Internet: eab@voa.gov
Fax: +1 202 619 3576

If you live outside the ARRL Maryland-DC Section and would like apply for an OBS appointment, contact your ARRL Section Manager. Section Managers are listed on page 12 of every QST magazine.

Chambersburg Special Events Station

W3ACH, the Cumberland Valley ARC, will operate a "Special Events Station" to commemorate the 132nd burning of Chambersburg, PA by confederate forces on July 30, 1864. The station will operate from 1200Z to 2100Z on July 20th. Operation will be conducted on the following frequencies: 3.870, 7.240, 14.250, and 147.12. For a certificate, send QSL and a 9" X12" SASE to CVARC, P.O. Box 172, Chambersburg, PA 17201.

Ham of the month



Joe Nunemaker, KD3VR



Every so often, an individual comes along who deserves recognition from the amateur community. In this instance, it's Joe Nunemaker, KD3VR, I would like to nominate as HAM OF THE MONTH.

Joe is president of the Green Mountain Repeater Association, Inc. and has been on the board of directors for the last 10 years. He is primarily responsible for maintaining the association's two repeaters (146.61 and 146.88). It doesn't matter whether the weather is below freezing with 2 feet of snow on the ground or whether it's blistering hot in July-never a complaint. Joe can be relied upon to keep the repeaters up and running 24 hours a day. This is not necessarily an easy chore when you consider the repeaters are now 25 years old!

But there's even more. Joe is always there whenever fellow hams have a problem with their equipment. "Bring it over now", he has said countless times without hesitation. And more often than not, your equipment is expertly repaired while you wait. And don't insult the man by asking "how much?"

Joe loves radio. He especially loves to take a piece of equipment and make it shine inside and out, electronically as well as physically. For those of you who have had the opportunity to watch Joe install or fix your rig, his work speaks for itself

and you are the more fortunate for it. I have never come across an individual as thorough in his attention to detail. Joe excels in troubleshooting and correcting problems. Additionally, he is without question, one of the neatest installers I've had the pleasure to come across in my 44 years in communications.

Am I finished? Not by a long shot. Joe also sponsors Naval Cadets from the United States Naval Academy, Annapolis, MD. He welcomes them into his home for dinners, takes them on area tours, carries them back and forth to area airports, and in general makes them feel right at home. How wonderful it must be for young men to receive this kind of warm hospitality when they're thousands of miles from home.

And if that's not enough, consider that Joe does all of the above while trying to establish a new marine electronics business. Talk about unselfishness!

Simply said, "magic hands" coupled with a "golden heart". Thanks Joe from all of us you have helped throughout the years.

Murray Green, K3BEQ
5730 Lockwood Road
Cheverly, MD 20785
(301) 773-5730

HAM OF THE MONTH: Submit your nominations to committee chairman Tony Young, WA3YLO, 12016 Long Ridge Lane, Bowie, MD 20715. See the Sep. or Oct. 95 issue of Auto Call for criteria.



FARfest Needs Your Help!



As you know, the annual **FARfest** is organized by the active trustees from member clubs. The actual event manpower is supplied by individuals and groups from various members of these clubs.

The physical work necessary to conduct the event begins on Friday and takes most of the day. Volunteer workers are provided with food and drink on the grounds. Saturday, more set-up continues and vendors begin to arrive, which requires controlled entry onto the grounds. Gate control, admission, tailgate sales and grounds clean-up are a few of the very busy Sunday tasks.

We are inviting additional clubs to become involved with the 1996 **FARfest**. If yours is one of the many faithful clubs who participate each year, we thank you, and ask you to take pride in assisting FAR with its only means of fund raising.

If you are not actively involved in the **FARfest**, please consider helping us this year.

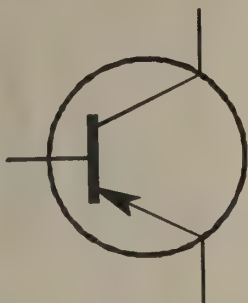
Specifically, we are in need of club groups who can volunteer for blocks of time at one of the TWO entrances.

This year, we are planning to recognize those clubs helping with ticket sales with a contribution to each club, commensurate with the person-hours and total attendance.

The gates are the most restrictive volunteer assignments, and two of the most responsible. Please consider offering a group from your club in 1996 for these or other tasks.

Please contact Al Brown, WA3FYZ (301-490-3188), or Tony Young, WA3YLO (301-262-1917) to make a commitment or for additional information. We are both listed on the first page of AUTO-CALL and are good in the call book.

Thanks and 73,
Tony and Al



Amateur Radio Training

John Forrest WZ4A
6111 Burnett St., Alexandria, VA 22310
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703) 644-3920
Anne Arundel RC	Tony Young WA3YLO	(301) 262-1917
Arlington ARC	Mike Callahan NW3V	(703) 251-5618
Antietam Radio Assn.	Robert Long KD3JK	(301) 824-5132
BRATS (Baltimore)	Joe Chidester W3SHZ	(410) 602-0353
Baltimore ARC	Essex Community College	(410) 780-6854
Fauquier ARC	Neil Spokes AB4YK	(540) 364-3861
Frederick ARC	Hal Silverman W3HWC	(301) 831-7946
Herndon Rep't Gp	Michael Weber WB8RDN	(703) 450-2304
Laurel ARC	Pud Reaver W3DQI	(301) 498-6293
Madras	Larry Ziecheck	(301) 984-6113
MD Mobileers ARC	Bruce Colburn AA3KR	(410) 437-1891
Montgomery ARC	Rocky Jones KC4UXO	(301) 216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703) 971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301) 249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703) 361-3091
Pentagon ARC	David Boyd K9MX	(540) 659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301) 862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(540) 722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301) 888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410) 586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(540) 659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703) 430-4149
Tri-County ARC	John Creel WB3GXW	(301) 572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703) 560-2779
Woodbridge Wireless	Jim Duffey WD4AIR	(703) 491-3170



Volunteer Examiner Cooperative

JOHN FORREST WZ4A
6111 Burnett St.
Alexandria, VA, 22310
(703) 971-3905

* Effective July 1, 1996, the Extra Class written exam question pool (Element 4B) will change. It is anticipated that the new question pool will be significantly different from the old pool. Be sure to use study materials appropriate for the current question pool.

* The maximum exam fee has been raised by the FCC to \$6.05.

* Copies of the complete (as of date) 1996 VEC Exam schedule from the *Auto Call* database are available. To obtain a copy, please send a large, self-addressed envelope with sufficient postage to cover 10 letter-size pages along with \$2.00 to cover copying costs to WZ4A at the above address.

1996 Schedule of Examinations

<p>June 2 (Sunday)</p>	<p>Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)</p>
<p>June 8 (Saturday)</p>	<p>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions.</p>
	<p>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC), Walk-In Contact: Bob Israel WC3I (301)262-5083</p>
	<p>Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674</p>
	<p>Manassas, VA - Ole Virginia Hams (ARRL VEC) Walk-In Contact: Harry Vorhauer, W4PVA (703)368-6050</p>
<p>June 11 (Tuesday)</p>	<p>Annapolis, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Lois Turner KA3VVQ (410)647-4178</p>

June 15 (Saturday)	<p>Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM</p> <p>Smithburg, MD - MADRA (ARRL VEC). Pre-registration desirable. Contact Mike, WB8VBW (301) 416-8447 box 110</p>
June 16 (Sunday)	<p>Hagerstown, MD - Antietam Radio Assn (ARRL VEC) Pre-Registration Required - No Walk-Ins Accepted. Contact: Al Boyers N3NVT (301) 733-6522 Days Bob Long KD3JK (301) 8245132 Evenings Before 9PM</p>
June 20 (Thursday)	<p>Towson, MD - Baltimore ARC (ARRL VEC) Pre-Registration/Walk-In Requirements Unknown Contact: HAM-TALK (410)426-8255</p>
July 13 (Saturday)	<p>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In. Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change starting in July. Call for directions.</p> <p>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In. Contact: Bob Israel WC3I (301)262-5083</p>
July 20 (Saturday)	<p>Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM</p>
July 27 (Saturday)	<p>Fredericksburg, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC) Walk-In. Contact: Carolyn Cavanagh AC4SK (540)373-7076 or Jim McCloud N4LZJ (540)786-8012</p>
July 28 (Sunday)	<p>Hagerstown, MD - Antietam Radio Assn. (ARRL VEC) Pre-Registration Requested - Some Walk-Ins Accepted Contact: Al Boyers N3NVT (301)733-6522 Days Bob Long KD3JK (301)824-5132 Evenings Before 9PM</p>

July 28 (Sunday)	Brunswick, MD (SweatFest 96) (ARRL VEC). Pre-registration desirable. Contact (301) 416-8447 box 110.
July 30 (Tuesday)	Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Jerry Gavin NU3D (410)761-1423
August 4 (Sunday)	Berryville, VA - Shenandoah Valley ARC (Hamfest) (Mount. ARC VEC) Pre-Registration Desirable Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
August 10 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey N4GUS (703)455-1510 Note: Temporary location change. Call for directions.
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
	Cumberland, MD - Mountain ARC (Mount. ARC VEC) Walk-In Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
August 15 (Thursday)	Towson, MD - Baltimore ARC (ARRL VEC) Pre-Registration/Walk-In Requirements Unknown Contact: HAM-TALK (410)426-8255
August 17 (Saturday)	Laurel, MD - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
August 27 (Tuesday)	Annapolis, MD - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Limited Walk-In Contact: Lois Turner KA3VVQ (410)647-4178

**September
1
(Sunday)**

Elkins, WV (Mountain ARC VEC) Walk-In Contact:
Walter Corley KF8SX (304)637-0506

**September
14
(Saturday)**

Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact:
Frank Mackey N4GUS (703)455-1510
Note: Temporary location change. Call for directions.

Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In
Contact: Bob Israel WC3I (301)262-5083

**September
21
(Saturday)**

Laurel, MD - Laurel ARC (Laurel VEC)
Pre-Registration Desirable, Limited Walk-In Contact: John Creel
WB3GXW (301)572-5124 after 6 PM

**September
24
(Tuesday)**

Glen Burnie, MD - Maryland Mobileers ARC (Laurel VEC)
Pre-Registration Requested, Limited Walk-In
Contact: Jerry Gavin NU3D (410)761-1423

**September
27
(Friday)**

Stafford, VA - Fredericksburg VE Team/Stafford ARA (ARRL VEC)
Walk-In. Contact: Carolyn Cavanagh AC4SK (540)373-7076
Jim McCloud N4LZJ (540)786-8012

- Remember to bring your license when upgrading! -



REMINDER...



...submissions are due the 1st day of the month prior to the month of publication. Submit all Club Columns, Shack Sales, and commercial advertising copy to:

John Queen
Editor, Auto Call Magazine
755 Woodland Way
Owings, MD 20736



Volunteer Examiner Cooperative

EXAM FEES:

- * Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
- * ARRL VEC exams cost \$6.05
- * Laurel VEC exams are free
- * Mountain VEC exams are free
- * W5YI VEC exams cost \$6.05

BRING TO EXAM:

- * Picture identification
- * Completed FCC form 610 (most VE teams will supply at exam)
- * Original and a copy of current FCC amateur radio license
- * Originals and copies of all active certificates of successful completion of prior exams
- * Exam fee (check or cash depending on VE team)

"GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

- * If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team. It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., January 25 for March issue)



1996-1997 ARES CALENDAR



March 1996

S	M	T	W	T	F	S
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April 1996

S	M	T	W	T	F	S
		1	2	3	4	5 6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 1996

S	M	T	W	T	F	S
				1	2	3 4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 1996

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July 1996

S	M	T	W	T	F	S
		1	2	3	4	5 6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August 1996

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

March

- 9 St. Patrick's Day Parade, Alexandria, VA
- 16 SKYWARN Advisory Group Meeting
- 17 St. Patrick's Day Parade, Washington, D.C.
- 20 Spring begins

April

- 5 Good Friday
- 7 Easter
- 13 Cherry Blossom Parade, Washington, D.C.
- 14 The MS Walk, Reston, Pentagon, Potomac
- 20 Bull Run Run (50 miles)
- 21 G.W.Parkway 15K
- 28 Loudoun March of Dimes Walkathon

May

- 4 ARES Disaster Institute
- 12 Mother's Day
- 18 Armed Forces Day
- MS 150 K Bike Tour, Virginia
- 27 Memorial Day (Observed)

June

- 1 N. VA EMS Council Disaster Mass Casualty Exercise
- 2 American Heart Assn 10K
- 14 Flag Day
- 16 Father's Day
- 20 Summer begins
- 21 Bike America Tour, Virginia
- 22 ARRL Field Day

July

- 4 Independence Day
- Fourth of July Celebration, Washington, D.C.

August

- 3 NCAC Simulated Emergency Test

September

- 2 Labor Day
- 22 Autumn begins
- 24 MS Half Marathon

October

- 14 Columbus Day (Observed)
- 27 Daylight Savings
- Marine Corps Marathon
- 31 Halloween

November

- 11 Veterans Day
- 28 Thanksgiving

December

- 21 Winter begins
- 25 Christmas
- 31 New Year's Eve
- First Night-Alexandria, Leesburg, Silver Spring

September 1996

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 1996

S	M	T	W	T	F	S
			1	2	3	4 5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November 1996

S	M	T	W	T	F	S
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December 1996

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 1997

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February 1997

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

• • • ANNOUNCING • • •

CLEAR, CRISP, & STRONG REPEAT AUDIO!

C3I_® HAS RELEASED SEVERAL NEW PRODUCTS AND IS SETTING THE NEW STANDARD IN AUDIO PROCESSING TECHNOLOGY

- **OUR NEW C3I-100PG, WITH PATENT-PENDING AGC, WILL MAKE ALL YOUR USERS VERY PLEASED. ELIMINATE WEAK AUDIO, STOP "PICKED FENCING", BRING EVERYONE USING YOUR REPEATER UP TO FULL QUIETING WITHOUT RAISING YOUR NOISE FLOOR OR HEARING THE PUMPING ACTION ASSOCIATED WITH ALL OTHER AGC CIRCUITS. THIS NEW PRODUCT IS OUR HOTTEST SELLER, 100s ARE NOW IN USE, CALL FOR FURTHER DETAILS. THIS IS AN AUDIO PROCESSOR AS WELL, SIMILAR TO OUR STANDARD PRODUCT, THE C3I-1000P.**
- **OUR NEW C3I-1000TT, IS A PANEL-MOUNT, 16 BUTTON MATRIX, SELECTABLE LOGIC, DTMF PAD, WITH FULL CONTROL OVER AUDIO LEVEL AND TIMING. WORKS PERFECTLY WITH THOSE CONTROLS THAT DEMAND PRESENCE OF COS BEFORE DECODING. NOW YOU WON'T HAVE TO USE A FAKE DTMF TO SIMULATE COS BEING PRESENT.**
- **ARE YOU TIRED OF LISTENING TO USER SQUELCH TAILS? GET RID OF THEM WITH OUR C3I-1000D, AUDIO DELAY MODULE.**
- **SOON-TO-BE-RELEASED: THE C3I-1000DVR, DIGITAL VOICE RECORDER; AND, OUR C3I-1000SQ, SIGNAL QUALITY VERIFIER. DETAILS WILL FOLLOW.**
- **YOUR CONTROLLER WILL INSTALL WITH EASE IN OUR CUSTOM FABRICATED RM-1000 EMI ENCLOSURE, COMPLETE WITH POWER SUPPLY AND SPACE FOR OTHER OPTIONS. THE RM-1000 IS AVAILABLE NOW FOR EITHER CAT-300, 700 AND CAT-1000 REPEATER CONTROLLERS, OR ANY OTHER CONTROLLER MOTHERBOARD!**
- **OUR RELATIONSHIP WITH COMPUTER AUTOMATION TECHNOLOGIES, THE CAT-300, 700 & 1000 PEOPLE, ALLOWS US TO FULLY INTEGRATE YOUR NEW CONTROLLER INTO OUR ENCLOSURE, ADDING C3I_® OPTIONS, AND FULLY TESTING YOUR CONTROLLER BEFORE DELIVERY.**
- **LET US HELP YOU REACH TOP PERFORMANCE! CALL, WRITE OR VISIT OUR HOME PAGE TODAY FOR MORE INFORMATION.
<http://www.C3IUSA.com>**

1-800-224-5137

**C3I_®, 406 NORTH PITT STREET, ALEXANDRIA, VA, 22314-2316
(703) 684-6980 OFFICE, (703) 684-1382 FAX**

Owen Wormser, K6LEW

Sam Ruffin, KM4OI

AMRAD**Amateur Radio
Research and
Development
Corporation**

Meetings: 2nd Thursday, 7:30 PM at Dolley Madison Library, McLean, VA.

Social: Every Saturday, 12:30 at Tippy's Taco, US Rte 29 near Cedar Lane just west of Merrifield, VA.

Repeater: WD4IWG, 147.21 MHz, near Tysons Corner.

Mail: PO Drawer 6148, McLean, VA 22106-6148.


Email: Randy Mays, WA6VFC, <rmays@amrad.win.net> World Wide Web: <http://www.amrad.org/>.

AMRAD Information Center (UNIX BBS): (703) 849-1161.

At our March and April meetings, the topic of discussion was multimedia repeaters. In May, George Lemaster, WB5OYP, gave a talk on the state of the-art in video compression.

Our June 13 meeting at 7:30 p.m. will feature a talk by David Weinreich, WA2VUJ, on digital signal processing and software radios. Please come and bring a friend.

73, Paul, W4RI

Chapter X

Society
of Wireless Pioneers

THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703) 536-9537

**Anne
Arundel
Radio Club**

Meetings: First and Third Thursday of the month at 8 p.m. at the Davidsonville Family Recreation Center, Queen Anne Bridge and Wayson Roads off Maryland Route 214 near Annapolis.

Mailing Address: P.O. Box 308, Davidsonville, MD 21035

On The Air: 2030 Thursdays when there is no club meeting on 147.705/105. Tuesdays at 2030 local time on 28.410. Wednesdays at 2000 on 444.400. The Chesapeake Weather & Traffic Net on 147.705/105 at 1100 and 1500 every weekend day and public holiday from April 1 to November 15. MSN (Maryland Slow Net) every evening at 1930 on 3.7170 Mhz.

Information: Margaret (Holly) Bevan, 410-923-0229.

At the April 18th meeting, Ken Stuart/W3VVN, ARRL Technical Adviser for Maryland, gave a very interesting and informative talk on batteries to one of the best attended meetings in recent times.

On the afternoon of March 31st AARC volunteers furnished communications for the Cherry Pit 10-Mile Race which started and ended at South River High School. Another AARC crew handled the public address system at the Marlborough Hunt Club Races at Roedown. The system was set up on Saturday by volunteers.

On April 28th about a dozen club members worked the Annapolis March of Dimes which started and ended at the Navy-Marine Corps Stadium. Their efforts were highly praised by the officials on the scene.

The Novice Class of '96 is over. It resulted in a dozen or more new hams. Most of them tested

early and already have their licenses. They were a steady group and some are already active club members.

At the clubhouse on April 13th Robert Israel/WC3I, Charles Tiemeyer/W3RMD and Robert Kammer/N3POX gave 59 tests to 28 persons. Thirty-one tests were passed with 17 upgrades. Other members of the team were: Herb Elkin/KA3FDO, Harlan Ray, III/AA3FE, Dick McKelvie/KE3HQ, Bettye Tiemeyer/K3VRZ and Holly Bevan/N3BMB.

73, Holly/N3BMB



Antietam Radio Association

Meetings: First and Third Tuesday of the month at 8 p.m. in the Conference Room at the Washington County Regional Airport, Showalter Road, Hagerstown, Maryland.

Mailing Address: P.O. Box 52, Hagerstown, MD. 21741

Nets: Tuesday 7 p.m. 146.940 MHz.; Wednesday 7 p.m. 447.975 MHz.; Thursday 7 p.m. 147.090 MHz.

Repeaters: 147.09+ and 146.94 -.

Information: Donnie Sue Mulligan/
KB3AOO (301) 582-2984

We had enjoyable meetings on April 2nd and 16th. Our president, Bill Harclerode/N8UKC met with a rabid raccoon and had to have shots for "hydrophobia". Too bad, but he is O.K. Just wonder if he has EVER been afraid of water?

Then on April 16th, we had a relatively short meeting with Tim Kener/N3VGS making an informal speech on "grounding". Thank you, Tim! We enjoyed your talk and your answers to our questions. We probably can think of other questions for him, maybe we can think of asking Tim the next time.

Then after Tim, John Smith/N3TDN gave us some information on the National Electrical Codes. Right now, the Ham Radio Gear is under part of the National Electrical Code.

John has information for us if we want it. Thank you, John, for a marvelous informal talk!

Congratulations to all those that took the tests on April 28th, passed and/or upgraded, or became HAMs!

A new club is formed! For the past several months, a group of regional amateur radio operators has been meeting face-to-face at the Amateur Radio Store in Hagerstown and on the air. How do they meet face-to-face ON THE AIR? Through the medium of fast scan television!

What began just a few short years ago with 2 or 3 hams sending video pictures in our area, has now grown to over 30 amateur stations equipped for television and uncounted non-hams tuning in with cable ready TVs, rotators, and UHF antennas to watch our amateur productions.

This new club has chosen the name VALLEY AMATEUR TELEVISION SOCIETY after 3 months of whittling down a long list of prospective titles.

This is a single interest club: television, and is not in competition with any other amateur radio clubs or associations. This information is from an article written by Tim Kener/N3VGS, the Secretary/ Treasurer of the Valley Amateur Television Society.

Tim, and several others, will be debuting at our hamfest on May 5 with a display table, active demonstrations, and a seminar.

Enjoy FATHER'S DAY and have a good summer!

73, Donnie Sue/KB3AOO

G^{AND}G ELECTRONICS

OF MARYLAND

8524 DAKOTA DRIVE, GAITHERSBURG, MD 20877

301-258-7373

KENWOOD = \$



= \$



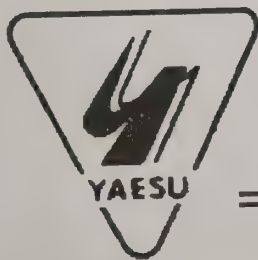
= \$

BIRD = \$

HUSTLER = \$

ICOM = \$

MFJ = \$



= \$



= \$

AEA = \$

WE BUY

Used Electronic Equipment of all kinds.

Transmitters, Receivers, Transceivers, Accessories and Junque Boxes.
Test Equipment, Too!

MONDAY, TUESDAY & WEDNESDAY

10:00 AM TO 5:00 PM

AND BY APPOINTMENT

VISA and MasterCard Accepted

PLEASANT Hill

HAM AND COMPUTER Show

JUNE 9, 1996

RAIN OR SHINE!

**Held AT THE PLEASANT Hill FIRE Co. CARNIVAL GROUNDS
(5 miles south of HANOVER, PA)**

Talk in 146.895-

Admission - \$5.00 donation
Tailgating - Admission plus \$5
PER 10' space
Children under 12 free
8 AM GENERAL admission
VE TESTING call (410) 239-8451
Breakfast & Lunch by
THE PLEASANT Hill FIRE Co.
All food and drink rights reserved

Indoor tables \$15 each
6 AM VENDOR AND TAILGATING SET UP
FOR ADVANCED TABLE REGISTRATION OR
MORE info, write to:
H.A.H.A.
P.O. Box 381
MANCHESTER, MD 21102
ATT: HAMFEST COMMITTEE
OR CALL (410) 239-8451

EASY ACCESS FROM BALTIMORE, WASHINGTON, HARRISBURG, AND NEW JERSEY



Sponsored by
THE HANOVER AREA HAMMING ASSOCIATION
AND THE PLEASANT Hill FIRE Co.



announcing the

1996

FATHER'S DAY HAMFEST

SPONSORED BY

FREDERICK AMATEUR RADIO CLUB

Sunday June 16, 1996

8:00 am to 3:00 pm

FREDERICK COUNTY FAIRGROUNDS

FREDERICK MARYLAND



●RADIO ● ELECTRONICS ● COMPUTERS

●GIANT OUTDOOR FLEA MARKET ● RAIN OR SHINE

●INDOOR COMMERCIAL AREA

TALK-IN

146.52(x)● 448.425(-) K3ERM ● 147.06(+) ● 146.73 (-)

GENERAL ADMISSION: \$5.00

TAILGATING SPACE: \$5.00ea + 1 general admission

6' VENDOR TABLE (INSIDE): \$10.00 each

On-Site Security -- Restroom facilities available

For more information call the SOUND SOURCE @ (301) 695-2633 code: 6393

MARYLAND RADIO CENTER

MRC

Authorized Dealer for:

Kenwood, Icom, TenTec, AEA, Kantronics,
Spi-ro, Barker/Williamson, Alpha Delta,
MFJ, ARRL Books, Callbook, Sams Books,
Mirage/KLM, Bencher, Cushcraft, Hustler,
lakeview, Mounts, The Pouch, Diamond,
Amidon, Butternut, Cable Factory, Larson,
Nye, Vanco, VanGorden, Vibroplex, DRSI,
Covercraft, Antenna Specialists, Diawa,
Astron

Nationwide Order Line

1-800-447-7489

Baltimore 880-HAMM

Washington 470-HAMM

Laurel 725-1212

FAX 725-1198

Burtonsville

Rt 198

Laurel

Fort Meade

I-95

Rt-1

B.W.

Pkwy

Washington DC

495 Beltway

Baltimore
695 Beltway

N

Rt 1 Laureldale
Drive

Acura
Dealer

MRC

BW
Pkwy

Maryland
City

Rt
198

Yes... We have a full service Shop.....

Check-out our Technical Library!

Please Note: Ham Exams
are no longer held at MRC.

**Open Mon. - Fri. 10AM - 5PM
Saturday 10AM - 3PM**



Arlington Amateur Radio Club

Meeting: Third Tuesday of each month, 7:30 P.M., Red Cross building, 4333 Arlington Blvd., Arlington, VA. Nonmembers welcome!

Net: Tuesdays (except meeting nights), 7:30 P.M., 144.87/145.47 Mhz FM.

Information: Mike Callaham, NW3V @ WA3TAI, callaham@CapAccess.org, (703) 241-5618.

LLBBS: Area 1 of Beachcomber Joe's BBS (703) 243-0024.

The April Meeting: Mike, NW3V called the meeting to order at 1930L, on April 16. Members present were: Gerald Adkins N4GA, Tom Protz N4BYF, Dennis Bodson W4PWF, Jack Reed WA4FXX, Michael Callaham NW3V, Joe Shepherd AB4RA, and Walt Parsons KT4EL

Mike, NW3V decided to proceed with our guest speaker and his program and then conduct our regular meeting. Our guest speaker was Michael Martin, N3RWF, of Radio and Television Interference and PEPCO. Mike is a well know amateur radio operator that has specialized in radio and television interference investigations for over eighteen years with Potomac Electric Power Company.

Mike said that he would describe an number of sources of radio and television interference sources and what could be done to identify and fix them. He pointed out that many of the sources are fire hazards and it is far better to find and fix them while they are annoying radio and television interference occurrences — rather than life threatening fires.

Of the 500 complaints he investigates each year, 50 percent are within the customers area of responsibility; 20 percent are caused by local radio and television companies; 20 percent are caused by power company equipment; and, 10 percent are

non-radio/TV interference problems. Mike explained the array of equipment that he uses during his investigations and how most of it evolved over the past few years. He tests any type of new equipment. It may make his job easier.

PEPCO's Radio and Television Interference Investigation Vehicle is a diesel truck that has no ignition noise, a couple of quality HF radio receivers that cover all of the frequencies in common use, a retractable TV antenna with plenty of cable to take into the complainant's home to demonstrate problems associated with the complainant's antenna system, a simple but efficient retractable Radio Direction Finding antenna to find the sources of interference and an oscilloscope scope to capture the images of the interfering noise, since each has a significant fingerprint.

Mike explained that most power line noises are related to loose hardware. An electrical energy field exists around all poles. When a very small gap develops, arching occurs and the noise can travel many miles along the transmission lines. Often, the noise is intermittent, since wood poles swell when they become wet, the gaps close and the arching ceases. Only, to return when the pole dries. A "hot stick line sniffer" is used to pin-point the sources of noises. This device is extremely directional and can be used from the ground or a bucket.

Eighty percent of the noises occurring inside buildings are generally related to:

- Door bell transformers
- Aquarium tank heaters
- Screw-in photo-cells
- Thermal protection on recessed lights

One important note was that, occasionally, these noise sources become sever enough to cause fires. In fact, some people have reported that previous sources of noise stopped after a nearby fire! Fortunately, there are few noise problems related to cable TV.

Mike, said that in his 18-years of noise investigation that he has never found a transformer as the source of power line noise. If an arc occurs in the oil, gas is formed and there is an explosion — that effectively eliminated the noise!

Mike's program was excellent and gave each of us a much better understanding of power line noises and how to find and fix them. All thanked Mike for the excellent and interesting program. We helped him pack up his gear before starting our regular meeting.

PEPCO provides Radio and Television Interference Investigation services to all of their customers. Mike will provide these same services to customers outside of PEPCO's service area, for a fee, through his independent consulting company, RFI, which can be reached at (301) 855-5961.

The minutes were approved as published and Tom, N4BYF provided the treasurers report and the fact that we have 18 paid up members. Dennis, W4PWF presented a request for amateur radio services from St. Jude Children's Research Hospital, that he received on April 9, from Jean Kintisch, concerning the Metropolis River Bike Tour, scheduled for May 11. The consensus of the club that this was too late a notice for AARC to take on this project. It was suggested that it be turned over to Alan Bosch, KD4FRK. Dennis, will call Alan.

Field Day is scheduled for June 22-23, and it is Alexandria ARC's time to act as host. Mike, NW3V will query the president to determine if they want us to help them, this year.

The Arlington County American Red Cross 10K Race, scheduled for May 19, is proceeding well. Alan, KD4FRK, missed this important meeting, but remains in charge of the amateur radio activities. A number of members of the AARC are planning to help Alan.

Rod Powell, KT4NB (KE4LEZ) our recently departed "back home to Alabama" member, sent us a QSO card indicating he has upgraded and has

a new call sign. He said, "Keep the Beacon coming!" Congratulations KT4NB. A bunch of us are on 3.858 kHz at 0900L on Monday and Friday. If you ever play hookey some day — or are on vacation, give us a call. K4UEK, Stan, in Bedford, VA is the NCS. The meeting ended late!

73, Walt, KT4EL



Baltimore Amateur Radio Club

Meetings: Meetings: Twice monthly, 7:30 pm at Towson Presbyterian Church, Chesapeake and Highland Avenues, Towson, Md.. -First Wednesday of the month -business meeting, Third Wednesday of the month - program.

Repeaters: W3FT/RPTR 146.67(-), 224.24 (-) (no PL) and 449.625(-)(PL 107.2) Note: two meter/220 Mhz. repeaters are linked.

Club Net: Every Tuesday night at 8:30 pm on 146.67/224.24.

NTS Net: Daily at 6:30 pm on 146.670/224.240

Club BBS: (410) 252-6238 (min. 2400 baud)

Club Voice Mail/Info: (410) HAMTALK

Hamfests: Greater Baltimore Hamboree & Computerfest/Maryland State ARRL Convention information: (410) HAM-FEST or (800) HAM-FEST.

Club Address: BARC, Inc., P.O. BOX 120, Reisterstown MD 21136

Well, summertime is almost upon us, and it's time once again for BARC to change its meeting place. Effective in about mid-June, BARC will stop meeting at Dulaney High School and instead meet at Towson Presbyterian Church in Towson for the summer. The exact time of the switch is uncertain, so if you are coming to one of our meetings in June, please ask for directions on 146.670 to be sure of going to the right place.

I hope those who attended the Greater Baltimore Hamboree & Computerfest had a good time and found what they were looking for. We

had gorgeous weather on both days, resulting in a standing-room-only crowd on Saturday, but Sunday's attendance was curiously light. In any case, we had near-record attendance (almost 20,000) and a good turn-out from the vendors and tailgaters. Our thanks to everyone, sellers and buyers alike, for coming to our Hamboree. The smiles and satisfied expressions on people's faces make it worth our annual fit of insanity.

BARC is still organizing foxhunts, though on an irregular basis. Generally, there is one a month, typically on the third Sunday, depending on the availability of the huntmaster, Chuck, K3FT. Everyone is welcome to participate in these cooperative hunts, so keep an ear cocked to our repeater on Sunday mornings if you would like to join in, as the hunts usually run from 1:00 pm to 4:00 pm or so. Additionally, some club members have been holding hunts of their own, so there is some activity out there to tune in to.

Under the heading of public service, some club members helped out with the March of Dimes Walk-a-thon in Baltimore at the end of April, and with the Mothers Against Drunk Driving bike-a-thon in early May. Thanks go out to Chuck, K3FT, our public service chairman, for keeping us busy so far this spring. If you would like to contact Chuck about public service events or the foxhunts, you can leave a message for him on our club voice mail system at box 5338.

Just a reminder about license testing sessions run by BARC: The next testing session will be on Thursday, 20 June, at 7:00 pm at Towson Presbyterian Church, Chesapeake and Highland Avenues, in Towson. The fee is \$6.05, and for more information you can leave a message for our license testing chairman, Bob, WB3HNV, at voice mail box 3468.

I wish there were more things to report, but the doings of BARC are pretty low-key right now. We're all recovering from the spasm of activity at the end of March!

... 73 de N3NYC/Hale



Capital City Amateur Radio Society

Meetings: 3rd Saturday of each month at 1200 hours at the Woodridge Public Library, 18th and Rhode Island Ave, N.E., Washington, D.C. Visitors welcome.

Repeater: W3EIL 144.51/145.11 MHz, open.

Nets: Regular net Wednesday at 2000 hrs, RTTY net Thursdays 2100 hrs, voice portion 2145 hrs, all on 145.110.

Mailing Address: CCARS, 1719 Franklin Street, N.E. Washington, DC 20018-2033.

Information: Steve, W3ETX, (202) 526-1329 or Chester, W3EIL (202) 529-9598.

The Greater Washington Area Soap Box Derby is scheduled to be run July 13th on Constitution Avenue (between Delaware Avenue and 3rd Street N.W.) Derby Director, Ken Thomasello is requesting that CCARS provide vital communications and electric power for this event. Plan now to participate and invite your family and friends to join you.

Franz, W3VIY has set up a WEB page on the Internet complete with pictures and lots of other "good stuff". His URL is <http://www.nmaa.org/member/w3viy>.

A swell time was had by all who boarded the bus for Atlantic City, N.J. on May 29th. This was one of several trips sponsored by CCARS. Congratulations to Jack, KB3KI and John, N3TCD for a memorable day at the seashore. Make your reservation now for our return trip to AC in the early fall.

Jaunita, N3NQC is back on the "145.11 Morning Show". She sends sincere thanks to the CCARS family and friends for their well wishes during her recent illness and confinement at the Washington Hospital Center.

Continued next page

Steve, W3ETX was released from Washington Hospital Center in March following open heart surgery. Rumor has it that he is grounded 'til the end of May, so he walks 2 - 3 miles every day. Do you think he is an Olympic hopeful? Steve also thanks CCARS family and friends for their well wishes.

There will be no Regular Business meeting on the 3rd Saturday in the month of July and August. See you at our first meeting in the Fall (September 21st) ENJOY A SAFE AND FUN-FILLED SUMMER VACATION!!

73, Steve - W3ETX



Columbia Amateur Radio Association

Meeting: 4th Tuesday of the month at 7:30 p.m., at the Bethany United Methodist Church, Bethany Lane, Ellicott City.

Net: 147.135 repeater at 8:30 p.m. each Tuesday except for meeting nights.

Youth net: 147.135 repeater at 7:30 p.m. every Thursday.

Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.

Information: Larry Russo, Pres - K3TFU, (301)725-2840.

Mailing: P.O. Box 911, Columbia, MD 21044

Our April meeting was devoted to preparations for Field Day which usually includes mini training sessions. Field Day coordinator, Alan-N3AC, has also set up a Field Day team meeting for April 29, at 7:30 PM at his house. He is also planning a party to inspect and pack up our Field Day equipment. Other meetings are scheduled for May

Plans are underway for our annual CARA Family Picnic to be held on June 8, from 1 to 6 PM. We will be at Burba Lake, Fort Meade, MD.

There are plans to set up an HF and a VHF/UHF station at the site. The club provides the hamburgers, hot dogs, beer, soda, coffee, etc. Members bring salads and desserts. To make reservations and/or to indicate what you will be bringing, contact Dionne-KA3ZDL, 410-531-2933, or Joy-KE3MP, 410-992-8209.

In a previous *AutoCall* issue, we mentioned that the club wanted to periodically publish recipes of the delicious dishes members bring to the annual dinner in January or at some of our other get togethers. The April issue of the CARA Newsletter carried the first of such recipes—a delicious recipe for Spinach Artichoke Casserole, submitted by Melinda-N3KIB.

Until later,

73's, Jean Williams-KB3AOT



Digital Mid-Atlantic Radio Council

Next meeting: Quarterly (locations TBA).

Address: P.O. Box 73, Accokeek, MD 20607.

The DMARC annual membership meeting was held in Temple Hills, Maryland on Saturday, 20 April with an excellent turnout of folks considering the gorgeous spring weather. The highlight of this gathering was the annual election of officers to carry forth with the many tasks required to promote effective growth and usage of digital communications in the DMARC sponsorship area. Stan Staten (W3INK) was elected to be the new DMARC Secretary, which is the chief operating officer position. Pete Butt (WA3UMY) was elected to be the new DMARC Treasurer. Additional Director positions were filled by Ross Merlin (WA2WDT), Tom Abernethy (WA3TAI), Lee Love (N4LXI) and Ben Sager (KC4ASF). A fifth Director slot remains unfilled at this time but we hope to get a suitable candidate into this position.

during the next quarterly meeting, tentatively scheduled for the July time frame.

We wish to take a moment to personally thank Tom Abernethy (WA3TAI), outgoing Secretary of DMARC, for his dedication and commitment to the improvement of digital communications in our area during this past year. Tom has devoted much of his energy toward the growth of this great medium and has taken it upon himself several times to spend a considerable amount of his own money to travel to digital conferences and represent the DMARC organization on a national scale. It takes people of Tom's caliber to "make things happen" so that everyone benefits in the long term. As Tom settles into his advisory board position, we hope he continues to make his mark on our hobby - thanks Tom!

The primary portion of the annual meeting was devoted to discussions concerning digital band planning and spectrum utilization/management issues. During the past year, DMARC representatives have made considerable progress in digital band planning activities including researching spectrum utilization, studying requirements for frequency separation to address use of multiple in-band relay transmitters at digital node sites and projecting growth trends. This has included extensive study of band plans enacted elsewhere in the country and working sessions to develop strategies that will optimize frequency use (and, in some cases, frequency reuse) for the various digital applications.

A major DMARC goal will be to complete the update to this work in progress. A motion was made by W3INK that "DMARC appoint a committee which seeks representation from all digital interests to develop a new digital band plan and spectrum management policies for the DMARC operating area within three months". The motion was approved by all members present. This effort will be, as in the past, coordinated with T-MARC and as many other groups as possible. The DMARC Board of Directors are committed to making use of all previous work accomplished to date in this effort. The consensus of the group is

that having a viable digital band plan and spectrum management policy is absolutely necessary as we continue our planning to accommodate the unprecedented growth of amateur digital communications we are observing in this area.

During the meeting, all attendees were given the opportunity to review progress being made in their respective local areas around the region to improve network connectivity and performance. Of particular interest was progress being made to increase packet throughput from 1200 baud to 9600 and higher. A number of folks are assembling 9600 baud systems, finances permitting. We hope to be able to report on a few "success stories" in subsequent Auto Call articles. If you are experimenting with 9600 (or higher) speeds, please contact me at WA3UMY@K3HKI.#SOMD.MD.USA.NOAM (packet) or petebutt@mail.ameritel.net (Internet) and fill me in. Let's work together to help get the word out as to which equipment/interfaces meet the challenge and which don't.\

As always, constructive input from all amateurs interested in digital communications is welcomed and encouraged. You are a valuable part of our TEAM approach to developing modern digital amateur radio networks in the mid-Atlantic area. If you would like to help, please contact the DMARC Secretary at W3INK@W3INK.MD.USA.NOAM (packet) or 3winks@msn.com (Internet).

73, Pete (WA3UMY) - DMARC PIO

0% Interest Up to 1 Full Year ZERO Down Payment <small>with approved credit ask for details limited time offer, not valid with any other offer</small>	Mike's CARPET Wall to Wall Carpets, Remnants, Rugs, Vinyl, Ceramic, Tile, Hardwood Floor All Major Brands at Discount Prices! FREE Estimate, Shop at Home Shop Here Hassle Free & Save Big! (301) 937-2221 (301) 983-0000 (703) 820-8080 1-800-480-MIKE Low Price Guaranteed!
---	--



Dept. of State/ Voice of America Amateur Radio Club

Meetings: 2nd Friday at noon in Room 7139B, Wilbur J. Cohen Building, 330 Independence Ave SW., Washington, DC.

Repeater: W3DOS/K3VOA (144.59 MHz Input, 145.19 MHz Output).

Net: American Foreign Service Net meets Sundays: 1500 to 1530 UTC on 14316 KHz; 1530 to 1600 UTC on 21416 KHz; 1600 to 1630 UTC on 28416 KHz.

STATE AND VOA CLUBS CO-SPONSOR 17TH BANQUET

The Department of State (W3DOS) and Voice of America (K3VOA) Amateur Radio clubs co-sponsored the Seventh Annual Foreign Service Amateur Radio banquet ("AFSARB-17") at the Fort Myer Officer's Club, Arlington, Virginia, on Thursday, 2 May 1996.

The scheduled speakers were Representative David B. Funderburk, K4TPJ, of North Carolina, and Richard A. (Tony) Stalls, K4KY0, a retired Secret Service Agent.

Rep. Funderburk was called away on short notice to his home district and was represented by Brian Chatman, his Legislative Assistant. Brian spoke of Rep. Funderburk's personal interest in,

and legislative commitment to, amateur radio. As the only Member of Congress holding an amateur radio license, Rep. Funderburk welcomes the expression of amateur views and hears from amateurs throughout the United States. He considers it important to ensure that any auctioning of frequency spectrum not impede future expansion of the amateur services.

Tony Stalls began his talk with an amusing account of dealing with local authorities, while in the Secret Service, in preparation for a presidential visit to Eastern Europe. Turning to amateur radio matters, he praised the Quarter Century Wireless Association (QCWA) for the depth of experience of its members and the fact that QCWA had never let him down as a member. He pointed out that the audience included two national officers of the QCWA, John Swafford, W4HU, Secretary, and Jack Kelleher, W4ZC, elected President. Tony concluded his remarks by stressing the importance of the issue of whether to drop, as proposed by New Zealand, the present Morse code requirement for amateur operation below 30 MHz. The matter is expected to be addressed at the 1999 World Radiocommunication Conference.

George Glavis, WB6SBW, acted as master of ceremonies. He, Tom and Jane Dorset, WB4J and KG3R, and John Swafford, W4HU, did the major organizational work for AFSARB-17. Jim Walsh, KI4PR, and Al Brown, WA3FYZ, Presidents of the State and VOA clubs, introduced the two speakers.

The following attended the banquet: Dexter Anderson (W4KM); Al (WA3FYZ) & Deborah Brown, Jim Brown (W5DRP), Brian Chatman, Gale (W7VPK) & Vivian Conard, Tom (WB4J) & Jane (KG3R) Dorset, Warren Frayne (WD4IZM), George (WB6SBW), Linda & Michael Glavis, Wilmah Getchell (W4LRD) & guest, Hugh Katz (KB3TB), Jack (W4ZC) & Margaret Kelleher, Fred Laun (K3ZO), Rita O'Halloran, Tony Stalls (K4KY0), George Stephens (WB3DAC), John Swafford (W4HU), Lou (W4MLR) & Vee Swafford, Jim Walsh (KI4PR), Bob White (N4EHP), and John Wood (WA5IPQ).

WORLDWIDE DISTRIBUTION



Jerry Torrey
Manager
WA2VGV

14803 Build America Drive, Bldg B
Woodbridge, VA 22191
(703) 643-1063, (800) 444-4799

INDIAN CO • NEW CASTLE DE
AZ • PORTLAND, OR • SALEM NH
CA • VAN NUYS, CA • WOODBRIDGE, VA



Frederick Amateur Radio Club

Meetings: We meet at 7 PM on the second Tuesday on each month at the Frederick County EOC on Montevue Lane in Frederick. Please call our Sound Source phone number for the latest info at (301) 695-2633 and use code 6393.

Club Call & Repeater: K3ERM 448.425-

The Frederick Amateur Radio Club (FARC) continues to make final preparations for our annual Fathers Day HAMFEST. This year the HAMFEST moves back to the Frederick County Fairgrounds in Frederick, MD and will be held on Sunday June 16, 1996. Further information can be found in our flier that is posted elsewhere in this publication and by calling the SoundSource number in the Club heading above. We look forward to seeing you there!!

May '96 has been another busy month with continued work on our new repeater (146.64/-), HAMFEST preparation, and ARES training (sponsored by the F.A.R. - GOOD JOB!!) and related events. Our May '96 club meeting featured "Amateur Radio Contesting" including a briefing by Potomac Valley Radio Club President Richard Boyd (KE3Q) and other members of the PVRC. The FARC thanks them for the presentation and the opportunity and thrill of seeing video of a large multi-station/multi-operator contesting station in action.

Speaking of contesting! We are looking forward to hearing you during Field Day 1996!

We hope to see you at the HAMFEST, at one of our monthly meetings, or on the air!!

73 de N3MVV - Scott - President, FARC



Green Mountain Repeater Association

Meetings: Board of Directors, Last Monday of each month.

Repeaters: KD3VR-146.61 (Cheverly), K3GXF-146.88 (Greenbelt).

Luncheon: First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, US Route 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM.

Mailing: GMRA, P.O. Box 523, Bowie, MD 20715-0523.

Information: John Williams, N5SJZ, (301) 805-5761.

There has been an aura of excitement and jubilation surrounding the GMRA Board of Directors, Control Operators and it's members the last few weeks, Rightly so, someone said, and why? may I ask? Without further ado, let me explain,

As has been mentioned before, numerous times, GMRA has been looking for replacements for the 146.61 and 146.88 repeaters which are around 28 years old. With many months of research, all of this came to pass at the Timonium Hamfest on March 30, 1996.

Along with Joe, KD3VR, GMRA President and his lovely Wife Alice, WB3AOA and a contingent of GMRA members tailgating at Timonium, also with the never ending vigilance of John, N5SJZ who is responsible for all this. John was able to find two newer repeaters for sale at the Hamfest. Joe and John checked both units and purchased two Motorola Micors solid state repeaters to replace the existing ones. Transition early summer.

To add to all of this overwhelming excitement, a new commercial type vertical dipole antenna was installed at the 146.88 repeater site. Thanks to the two that climbed the tank, Mike, KØ7V, and Jake AB3A who did the actual installation along with

many members and helpers on the ground. This work was accomplished on Sunday, March 31, 1996.

73s from Ken Easton N3HLY



Hanover Area Hamming Association

Meetings: Second Tuesday night of the month at the meeting hall of the Alesia Free Methodist church.

Mail: P.O. Box 381, Manchester, MD 21102

Voice mail: (410) 239-8451.

Repeaters: 2 mtrs: 146.895-, 440: 447.675-, 6 mtrs 53.19-.

Club Callsign: KB3BLS.

BBS: 145.07

April has been a busy month for the Hanover Area Hamming Association! In the beginning of the month many of the club members worked on tuning up the six meter handhelds that were donated to the club. All the members that purchased crystals for their handhelds have now received their tuned-up radios. Thanks to the many people that helped to tune them.

At Tech Nite we helped the numerous members that obtained mobile Port-A-Comm adapters on how to hook them up and properly mount them in their vehicle. Also we discussed the requirements for an efficient six meter mobile antenna installation.

Once the weather broke for outdoor work, our "tower crew" got busy with enhancements at the six meter site, installation of a new antenna at the BBS site for our future 2400 baud user port, and in Gettysburg, making ready for our fifth remote receive site on 146.895-.

Still on the list to do is to secure remote receive sites in York (PA) and also in the Towson and Woodlawn (MD) areas.

Among these projects the hamfest committee has been busy preparing for our Pleasant Hill Hamfest on June 9. We have painted "hamfest" signs, completed a bulk mail, and are signing up vendors. The hamfest committee reports that the new voice mail system (410-239-8451) works great!

Until next month... 73, Kim N3LTM



The Herndon Repeater Group

On-the-air meeting: Mondays at 9:00 pm on the Herndon repeater.

Repeater: N4FSC, 145.310 (Herndon)

Mailing: Herndon Repeater Group, P.O. Box 5073, Herndon, VA 22070-1964.

Information: Mike N4FXP, (703) 406-3158.

The Herndon Repeater Group (HRG) is a family-oriented ham radio club affiliated with the N4FSC repeater in Herndon, VA. Membership is open to all, and the club holds several social and operating events each year. Dues are \$20/yr. for your entire family; members have access to the repeater's autopatch. All area hams are warmly invited to join our information net on Monday evenings at 9:00 pm.

Our Holiday bash was a huge success for everyone concerned. Craig, WA3RGH, once again opened his home to the HRG family, and this year was rewarded by winning the grand prize in our holiday raffle; a brand new 2 meter mobile rig! Congratulations, Craig!

Over pizza and sodas at a local restaurant, Nick (KD6ADY), led HRG in plotting its strategy for another Field Day success. As in recent years,

we'll be set up at Lake Fairfax Park. All area hams are invited to participate, or just visit. There's lots for the family to do while you rack up FD points: fishing, swimming, boating, picnicking, and rides. We'll be operating QRP again this year, so operator skill is everything. The club will provide food and soft drinks, so you can concentrate on setting a new world record! Come join us.

We've even got Field Day logging down to a fine art. Mark, KR4FH, has concocted a distributed, wireless, packet-based network database for automatic logging and dupe checking. A laptop and packet station at each operating position links you to the central logging server. No muss, no fuss; you have all the fun while Mark's brain child does all the work. Check out a prototype on 145.03 at Mark's node KR4FH-10.

73 de Mike, N4PDY



Historical Electronics Museum Amateur Radio Club

Meetings: Third Wednesday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and ElkrIDGE Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

Net: Monday 8:00 PM, 146.67(-)/224.24(-) MHz (courtesy of BARC).

Information: Gary Ryan, (410) 969-0410.

Mail: P.O. Box 746, Mail Stop 4015, Baltimore, MD 21203.

Street address: 1745 W. Nursery Rd., Linthicum, MD 21090.

The meeting of April 17, 1996 was opened with the sad news that Freeman Frugei, W3YBB had become a Silent Key. Freeman was a founding member and Secretary of HEMARC as well as a long time member of the Friendship Amateur Radio Club.

Charlie Angel, AA3FB reported that the modulating amplifier for the TBL-13 has been refinished and the first smoke test has been passed. We are getting close. Heru Wamsley, W3WVV announced that he has all but completed the design of the tube voltage regulator for the TBL-13 and that the chassis has been punched and is in the works. This should improve the CW chirp of the transmitter.

President Gary Ryan, W3GMY announced that Lois Turner, KA3VVQ has agreed to chair the first HEMARC field day effort. The most likely location will be the lawn of the Museum. Volunteers are needed.

Rol Anders, K3RA reported that the General Class course is moving along well and testing is tentatively scheduled for late May.

A new set of Rules and Regulations for the club that better comply with the liability insurance policies for the Museum were ratified by the membership.

The meeting night was discussed because several members wish to be active in other clubs that meet the same night. It was agreed that BEGINNING WITH THE SEPTEMBER 1996 MEETING, HEMARC will meet on the second Wednesday night of every month.

A presentation and walk-through of the new ATV club station was conducted by Heru Wamsley, W3WVV. Several BRATS ATV stations on the repeater participated in the two way demonstration. The pictures were good and stable from all stations.

Many thanks to the Baltimore Radio Amateur Television Society for their splendid support of the demonstration working session. Amateur Fast Scan Television is a real live and impressive activity in our area.

Ernie Farkas, K3CBW led the membership through the tune up and operating procedures for the TBL-13, using 20 Meter CW for the training. Each member was given a tune up chart and short

form procedure and the opportunity to "turn the knobs" and watch the meters wiggle. With the present antenna, 20 and 40 Meter CW operation has been established and was included on the charts and in the procedure. This reminded everyone how truly wonderful it is to operate with the one knob tuning and push button band changing of the modern transceiver.

HEMARC still needs more hams who are interested in operating this historical station.

73 Chip, W4PBG



Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings: 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel Md.

Social: 2nd Wednesday of each month, except December (Call for directions).

Nets: 1st & 3rd & 5th Wednesdays, 8:30pm, on 147.225+, no tone.

Mail: P. O. Box 3039, Laurel, MD 20709-0039

Exams: 3rd Saturday of each month, to pre-register contact: John/WB3GXW (301) 572-5124 after 6 P.M.

Information: Jim/WI3N (301)725-6829 or Pud/W3DQI (301)498-6293.

MAY FESTIVALS

The month of May was "fantastic"! (Even though this report is being written in April.) The Laurel club set up a "Ham-Gram" station at the Montpelier Festival on 5 May and gave a great demonstration of Amateur Radio for the general public. Club members also supported the Laurel Main Street Festival on 11 May by providing the communications support for the Festival staff and operating the "Information" booth at the Festival. These two festivals have become major public service events during the year for the Laurel ARC.

HAPPENINGS !

Our newsletter editor, John/N3GXA, recently had surgery for appendicitis and has now recovered. His short absence from the newsletter made many of us realize how much he does in preparing the monthly newsletter. THANKS John for all your work!

Pud/W3DQI gave a presentation on the National Traffic System and the handling of messages at the April club meeting. Pud is active in the Maryland Emergency Phone Net (MEPN, 3.920 MHz, at 1800 hrs. local), and encouraged others to become involved in traffic handling.

The club will be providing communications for the Pallotti 5K Race/Walk on 8 June. Mark/N3NTQ is coordinating, and those who can help should give him a call. Matt/N3JMK, is planning the set-up for Field Day, which will be at Supplee Park on Brooklyn Bridge Road. Get those emergency batteries charged!

73 de Roger/N3MIJ



Loudoun Amateur Radio Group

Meetings: Third Saturday of each month; 8:00 a.m. Call for meeting place information.

Nets: Every Sunday evening at 8:00 p.m. on 28.360

Mailings: Loudoun Amateur Radio Group, P.O. Box 1004, Purcellville, VA 22132

Information: Gary Quinn, NC4S, (540)822-5690; or John Unger, W3GOI, (540)338-4620.

Our small, but active, club continues to grow. The past few meetings have been very well attended and have featured a variety of interesting topics.

One of these was an excellent presentation on the history of Vibroplex bugs by Paul Bock,

K4MSG, who brought along part of his bug collection to demonstrate the various models produced over the years.

We also had a chance to try out our "fists" on different types of bugs. It was a struggle even for the experienced CW keyer operators to send good code without some practice. Those electronic keyers can spoil you!

At the April meeting, club members enjoyed viewing the video produced by the 1992 South Sandwich Island Dxpedition, VP8SSI.

This is an very well produced documentary that details the hardships endured by this dxpedition and made those members who received QSL's from VP8SSI more appreciative of what those hams went through to make those precious QSO's possible.

Much of our meeting time recently has been taken up with discussion of the upcoming Field Day activities. We will be setting up at Ida Lee Park in Leesburg for the third year in a row and expect to continue to improve our score.

The club tentatively plans to operate 3A and will try to beef up its effort on the VHF end of the spectrum as well as improve the HF antenna situation. We have an enthusiastic and active group spearheading our efforts this year.

Our balloon launch project is still on schedule for a tentative launch in mid-May. This first effort will include only an on-board 2-meter transmitter beacon for monitoring the in-flight trajectory and for recovery (we hope...). We are limiting the maximum altitude to about 30,000 feet in order to minimize the recovery problems.

Area hams are invited to join our weekly 10-meter SSB net, which meets every Sunday evening at 8 p.m. local time on 28.360.

73 - John, W3GOI

(see you on the air on FD 1996!)



The Maryland Apple Dumpling Radio Amateur Society, Inc.

Meetings: 2nd and 4th Thursdays - 7:00 P.M.
NBC Building - WKYS Conference Room,
4001 Nebraska Avenue, Washington, DC.

Nets: 1st and 3rd Thursdays at 9:00 P.M. on
145.45 MHz (PL-5A).

Repeaters: 444.100/449.100 MHz (PL-2A),
145.45/144.85 MHz (PL-5A).

WWW Address: <http://mvhsl.mbhs.edu/~fwright/MADRAS.html>

Mailing: P. O. Box 2468, Wheaton, MD 20902

Information: Larry Ziecheck - N3GKZ (301) 984-6113, Jean Blacik N3PLC (301) 984-6113.

Slides, a video tape and an actual transmission from space, recorded on a cassette, were used by Ron Parise WA4SIR, when he gave a talk on "Amateur Radio Operation From Space" to our club on April 11th. Ron, who is a very interesting speaker, gave an excellent presentation on his adventures aboard the spacecraft during his last mission. There was not a person in the room who didn't want to make at least one journey into the great unknown.

The craft may be small and somewhat cramped but we all wanted to experience the thrill of outer space travel. Several of the female hams and the XYL's present were delighted to learn that one drops at least 10 pounds while in space. What an incentive to sign aboard. Thank you, Ron, for sharing your experiences with us.

Lenny Schacter N3RPQ, filled us in on the National Academy of Science's "Special Event" which took place on April 13th & 14th. Lenny spoke at our April 25th meeting. For many, many years he has been collecting antique radios and was able to let the Academy use nine of his collectibles for a presentation they put on to mark the anniversary of two important events in the history

of broadcasting - The 95th anniversary of the first trans-Atlantic wireless communication and the 70th anniversary of the founding of the first radio network.

A special thanks to Lenny and all the many hams in the area who participated with the group from the Academy to make this presentation so memorable and enjoyable.

MADRAS's board members are in the process of making some changes to our membership categories and revising our Bylaws.

We hope to propose these changes to our Club at our first meeting in September. This will give us the summer months to get together and decide what we want to revise and what we want to stay the same concerning the above. A committee has been selected and we will start getting together right after Field Day '96.

Mark your calendar for June 13th, its our last meeting until September. We will be having our Annual Picnic and Barbecue in July and our End of Summer dinner in August.

This year also marks the 10th anniversary of the founding of MADRAS and we hope to plan a big celebration for the fall.

MADRAS extends best wishes to all the clubs in the area who are participating in Field Day '96. We have all worked very hard during the past months organizing for this very special event and now it is finally here.

If anyone out there is looking for a few fun-filled hours they would like to spend operating with a club for Field Day, MADRAS has some openings in our schedule. You can contact Jean or Larry during the day at 301-984-611 Maybe you would like to drop by our site and see our operators at work and join us for a soda or a cup of coffee. Everyone is welcome.

73's Jean N3PLC



Maryland FM Association

Happy 30th Birthday to The MFMA, Inc!

The Maryland FM Association, Inc., more commonly known as The MFMA, was incorporated on June 17, 1966 by K3NZZ, W3TRG and W3YVV.

This organization was drawn together by the development of Channelized FM operation on 2 meters which had begun to develop in the Baltimore - Washington area about 1962.

The first Channelized FM operation I am aware of originated in 1956 when the Maryland State RACES Organization and the Anne Arundel County Office of Civil Defense acquired commercial General Electric equipment and issued it to the RACES affiliated Anne Arundel Radio Club. A plan for Channelized FM operation on 6 and 2 Meters which designated various "Channels" to Amateur RACES operations across the state was developed at the State RACES level.

Those of us involved in these activities desired to acquire additional equipment to expand the FM operations. Amateurs were indirectly aided in this endeavor as the need for additional channels for Public Safety and Commercial radio users grew and the FCC developed a "Narrow Band Plan" that was implemented during the late 50's.

During this time much of the FM equipment that was used in Public Safety and Commercial service was replaced and the older, wide band, equipment was put on the surplus market. General Electric, Link, Motorola, and RCA equipment generally designed for single channel operation from 6 volt battery systems was acquired and modified to cover the amateur bands. AC power supplies were built and interfaced to the equipment to permit "base" station operation.

As interest grew in this mode of operation, and more 150 "Megacycle" equipment became available, the number of stations on 2 meters began to grow. The channelization plan developed by the RACES organization became the "band plan". Some individuals felt a repeater would provide a worthwhile advantage as the range was somewhat limited for mobile to mobile contacts.

In early 1963 a repeater was placed in operation by W3YVV in Harmans, Md. This repeater was a split site system with an input on 146.34 Mhz. and an output on 146.94 Mhz. 146.94 Mhz was the simplex operating frequency and it soon became apparent that the repeater needed a channel of its own. The repeater transmitter was shifted to 146.76 Mhz. This necessitated conversion of mobile equipment to 2 frequency (channel) capability, not easily done on some equipment, and therefore this limited the number of early repeater users. The input was later moved to 146.16 Mhz and the 600 Khz separation, or split as it is known today, became standard.

Channelized FM operation began to catch on and other repeaters were established around the Country. By mid 1964 better locations were sought for the repeaters. Efforts to gain permission to use existing commercial tower sites brought with it the need for organization, insurance and related issues best served by a Club.

During late 1964 an association of about 25 amateurs from the Baltimore - Washington area began a club, to be called The Maryland FM Association. The club took over operation of the W3YVV repeater and located the receiver at a tower site near Ellicott City, Md. The transmitter remained at Harmans. Later these Club members found it advantageous to Incorporate and did so in 1966.

Membership grew and monthly meeting attendance would sometimes total over 50 members. During the early 70's the growth of FM operation on 2 meters had caught the eyes of manufacturers of Amateur equipment and multi-channel amateur equipment began to appear on the

market. As this new equipment and additional multi-channel retired commercial equipment became available operation on 2 meters grew tremendously. Attendance at some MFMA meetings held at Goddard Space Flight Center sometimes reached 150 people. Parking lot "mini fests" were held before the meetings. There were speakers on various topics related to Channelized FM operation.

As the repeater systems sponsored by MFMA grew, the need for financial support also grew. Equipment, commercial antennas and transmission lines, site leases and power bills added up. Although membership support was great, it was not adequate to meet the desires of the repeater users. The need for added financial resources grew and the MFMA Annual Hamfest was born, first held in National Guard Armories around the area and presently held in May of each year at the Howard County Fair Grounds in West Friendship, Md.

During this 30 year period we have seen many changes in Amateur Radio. Technology, an evolution of available equipment, license requirements, operator privileges, and a tremendous growth in Channelized VHF and UHF FM operation.

MFMA membership has averaged about 100 over the last several years. The club presently sponsors linked repeaters on 146.76, 224.76 and 444.0 Mhz which are located in Jessup, Md. The 146.76 Mhz system has several remote receivers throughout the Baltimore-Washington Metropolitan area and has a slave transmitter, also on 146.76 Mhz, in Washington DC. Meetings are held quarterly, generally in Savage, Md. The Board of Directors meets monthly to conduct necessary MFMA business.

Anyone interested in joining the Club or otherwise corresponding with the Club may write to the Maryland FM Association, Inc., PO Box 351, Hanover, Maryland 21076-0351.

Happy 30th Birthday to The MFMA, Inc.



The Maryland Mobileers Amateur Radio Club

Meetings: First Friday of each month at the AA Co. EOC, Crownsville State Hospital grounds Crownsville, Md.

Repeaters: WA3PJQ - 146.805 & 449.125 both in Millersville, Md. W3VPR - 442.3 in Annapolis - Joint usage AARC.

Social Breakfasts: 15 days (3 Saturdays) after club mtg, at Rick's Cafe in Odenton at 9 AM.

Mailing: MMARC, P.O. Box 935, Severn, Md. 21144

Nets: 2-Meter on 146.805 @20:30 local time every Monday, 10-Meter CW practice net @19:00 Monday on 28.230 MHz.

Information: H. John Kohl, KO4A, (President) 410-757-8148. Bill Ziegler KA6TYY (410) 987-2384.

Last meeting's guest speaker was Mac, WN3C, who gave a talk on how hams have provided communications during the pass CAM Tours (Cycle Across Maryland). CAM is a non-profit organization dedicated to bicycling and bicycle safety. CAM Tour is one of the largest non-competitive bicycle events in the area - nearly 1500 cyclist riding 40 - 60 miles a day for six days over a route that covers a large portion of the state. Amateur radio communications have evolved into an integral part of the CAM Tour.

CAMPING?? - What's more fun than going camping??? Going camping with some HAMS!!! Bruce, AA3KR, has organized the 3rd. Annual MMARC Family Camping Trip this year and it will be at the Front Royal, VA. KOA Campground on June 7th & 8th. Don't miss the big campfire!, Watch giant camping rigs pull in and set up! Enjoy a few quiet days with nature (NOT!). The real intent of these camping trips is not to do QRP, DX contest or create an antenna farm above your trailer, but rather to get together with others who have many of the same interests, and hey, if you by

chance set up your rig and make a contact, great!! Kids are welcomed.

FIELD DAY - will be here before we know it. This year the MMARC will be participating in field day and has reserved a site at Downs Park (near Pasadena). Ken, N3OPI, is the Field Day Coordinator and is always looking for an extra hand to help out. This is an excellent time to get to know the members in MMARC and also have a little fun. If you have been shy getting on the HF Bands, stop by and I bet in no-time you will be involved and making those contacts.

USS TORSK - Saturday May 18th.! Circle that day on your calendar to enlist as a crewmember of the submarine USS Torsk.

John, N3BTM, heads up the team that supports Armed Forces Day and Amateur Radio by conducting a special event station on board the TORSK, moored in front of the Aquarium in Baltimore's inner harbor. The event is scheduled to begin at 1000 - 1600 (10:00 am to 4:00 pm for you land lubbers). Don't have HF privileges?? Don't let that stop you. There will be a control ops there, so you will have the run of the bands, and the best part everyone will be looking for your contact, you will be on the receiving end of the pile-up! So, if you want to log some sea time, join us.

Please note our club meeting and breakfast times. We would be happy to meet you and share some good "Ham Stories"!! Don't hesitate to use our repeater if you are in our area.

73, Bill, KA6TYY



Reminder - all submissions for

AUTO CALL

are due no later than
the 1st of the month prior to the
month of publication!!



**Metrovision
Amateur TV Club**
Fast Scan Color ATV

Meetings: Quarterly: Time and place TBD.

Repeater: WA9GVK/4 (video/audio) Input: 425-431 Mhz. Output: 438-444 Mhz. Accessible 144.970 Simplex FM Voice.

On-the-air: Sundays and Wed. 8:00 P.M.

Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, Va., 22041.

Information: Sam - N3GHY (301 430-3373)

Jim - KA4CKI (703 494~342)

Tom - KO40X (540-752-2100)

Rich - KA3BTD (301-843-1253)

Being a new subscriber to ATV Quarterly magazine I find it quite good in all areas. There is plenty of advertisements for ATV equipment, projects, and some quite good articles.

Some of the articles are; R/C AIRCRAFT FOR ATV, 13CM GASFET POWER AMP, DUEL BAND MOBILE ATV ANTENNA, TRUE ATV "S" METER, NEW LAND ATV RECORD and 13CM ATV EXCITER just to name a few. As you can see there are many facets in ATV that one could pursue.

Should you have a question for us about ATV the repeater is accessible on 2 meters on 144.970 in the FM simplex mode. Our nets are every Wednesday and Sunday at 8 PM. Gerald - KB4QGI and JIM - KA4CKI continue to do a great job as our net control operators.

Burnie - WD40 has a lot of VCR tapes he plays over the air for us. We find that Burnie is a well traveled person.

Tom - KO40X is re-engineering his tower. He is in the process of working with a commercial company so that he might rise and lower his tower with a motorized screw type device attached to the base plate. On several occasions Tom has

experimented with 1.2 Gig for ATV at his QTH.

Last year Tom and Uriah - N3UFN did an ATV experiment. They placed an ATV transmitter in a car and drove around to see what kind of results they would have. For the most part it was very successful.

While thumbing through the ARRL Repeater Directory I noted that there are 39 states plus Puerto Rico where there is active ATV. There is approximately 157 different call signs associated with these ATV repeaters. California has set aside specific frequency groups for simplex ATV. Canada has ATV repeaters in Alberta, Manitoba, Ontario and Quebec.

This is impressive considering our repeater trustee Bruce Brown - WA9GVK/4, pioneer and inventor of ATV in the early 70's got the first ATV club together to build the first ATV repeater. Now that there is commercial ATV equipment available it is easier than ever to get on ATV.

ATV is no more expensive or complex than packet. All the guess work is taken out when you buy the commercially available transceiver. Just add a video camera such as a camcorder, a PTT microphone, a 400 MHz. RF amp and a good 400 MHz antenna. That's all there is to it. Should have the means to see us on our nets let us know. You can contact us on the above telephone numbers or contact us on 144.970 simplex .

I'll be "seeing you" 73's Rich - KA3BTD



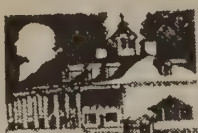
Romano & Mitchell

CHARTERED
CERTIFIED PUBLIC ACCOUNTANTS
MANAGEMENT CONSULTANTS

7910 WOODMONT AVENUE
SUITE 1110

BETHESDA, MD 20814
TEL (301) 652-5040
FAX (301) 907-8210

JOHN T. NUTTMANN
CPA



Mount Vernon Amateur Radio Club

Meetings: Second Thursday of each month, 7:30 p.m. (except December) Mt. Vernon Governmental Center 2511 Parker's Lane, Alexandria, VA 22308.

Nets: Every Tuesday at 9:00 p.m. Starts on 2 meters then moves to 10 meters on 28.408.

Repeater: WD4PDP 146.055 input / 146.655 output.

Mailing: Mt. Vernon Amateur Radio Club (MVARC) c/o Joe Salemi KR4CZ, P.O. Box 7234, Alexandria, VA 22307.

Information: John KI4HK, (703) 780-2882 or Julie KD4WSZ, (703) 799-9466 or Packet 145.650 KD4LST-1.

Welcome back to Mike, KE4ER, after a recent illness and recovery. Glad to hear him on the morning drive QSO and see him at the meeting. John, WQ4L, recently returned from a trip to Switzerland where he operated the International Telecommunications Union station 4U1ITU. Loyd, K8EI, was in town again to finalize the sale of his house after his recent move to Utah.

MVARCers provided some public service during April. Several members helped on the Cherry Blossom festivities, while nine others supported the 15K Run from Mount Vernon Hospital to Jones Point. The April meeting featured a "Show and Tell" or Gadget night where eight members displayed and discussed unusual homebrewed and commercial items including QRP gear, GPS and proximity receivers, frequency counter and test equipment. Several members went to NJ4F's super station near Fredericksburg to work the SSB WPX worldwide DX contest. The group made over 1000 contacts with some QSOs with stations in Europe, South America and Japan.

The 146.655 repeater noise problem persists. The suspected cause is a combination of loose

elements in the antenna, and an external noise source somewhere in the repeater area. Several members heading to the Dayton Hamvention will meet with the Diamond antenna representatives to discuss the problem, and will check additional vendors for possible replacement candidates.

About a dozen members turned out for the QRP Field Day, held outdoors at Lee District Park. The day was sunny, but a constant stiff breeze left the area somewhat chilly. The Club's site was equipped with two transmitters, a dipole and a vertical. Power was supplied by storage batteries. While a high score would've been nice, a good time was had by all. Thanks to AA4ZS and WB4EEA for sponsoring the event.

The VE Testing Program returned to Lee District Park in April and plans call for it to remain there through June, until the expected building renovation activity begins. Once the building construction begins, the testing will temporarily move to a new site. Anyone wanting to take a test after June should check the AutoCall Testing list, monitor the MVARC net on Tuesdays at 9 PM, or check the Club newsletter for current information.

73, Chuck, W3HSW



National Capitol DX Association

Meetings: Feb, Apr, Jun, Oct and Dec. at a member's home. Contact the Secretary (Rick Murphy, WA1SPT) for details.

On-the-air: Every Sunday at 8:30 PM on the 147.000 repeater. All are welcome!

Information: Jeff Strandberg-WV3B (301) 587-3396, Rick Murphy-WA1SPT (703) 280-2637 or Leo Boberschmidt-KA3TGY (301) 946-3738.

The April 22nd NCDXA meeting at WV3B's featured a surprise chat by Larry WJ1R/UA6HZ on the challenges of operating HF in the former

USSR. Despite the fact that Larry mentioned his QTH as UA6HZ was mere kilometers from Chechen turmoil, none of us correctly identified the mysterious objects atop the desk in one of the photographs of his shack as assault rifle clips.

Approximately thirty NCDXA members and guests attended this meeting, and Yuki KE3KL/JH3NBN was presented with a check for \$100 on behalf of the club for his part in the upcoming TI9X DXpedition to Cocos Island.

By now I trust many of you have worked TI9X on at least one of the frequencies given at the meeting. Also, please remember to provide me with a canceled check for any contributions made to the Kermadec Island DXpedition scheduled for May; NCDXA will match your contribution to SGI DX Expeditions for this effort.

Subsequent to the meeting, W3ACE joined the roster of NCDXA life members — N1KCE, N4MQX, WA3DVO, WA1SPT, WV3B, AA6DC, K1ZZI, and W3AZD (honorary). Known to us simply as Hank, The Honorable Armin Meyer served as a United States Ambassador for many years, holding the calls YI2AM in Iraq, OD5AX in Lebanon, YA1AM in Afghanistan, EP3AM in Iran, and JH1YDR in Japan. In his letter, Hank noted that the travel schedule and responsibilities of what must be at least his fourth career have precluded attendance at recent NCDXA meetings, but he sends his regards to all.

The next two NCDXA meetings will be held in conjunction with the Potomac Valley Radio Club on June 15th at W3LPL's and on August 17th (Fowlfest) at W3YOZ's. Please bring a lawn chair (NCDXA will provide plenty of cold soda and 807s) and plan to meet around mid-afternoon at both sites.

As always, NCDXA welcomes guests to the fraternity (and sorority) of DXing in the amateur community. Please join us at either or both upcoming meetings, or QRV for the weekly Meeting on the Air Sundays at 8:30 p.m. on the

147.000MHz (-) K3WX repeater, with Leo KA3TGY as net control. All are welcome to check in.

Until next time, 73 and Good DX.
Jeff Strandberg - WV3B



Prince George's Wireless Association

Meetings: First working Tuesday of each month, 7:30 PM; American Red Cross bldg., 6206 Belcrest Rd, Hyattsville, MD 20782

Club Station: K3CEZ

Mailing: 4109 Kennedy St., Hyattsville, MD 20781

Information: Frank Holton - WA3ZMW
(301) 927-1245

The regular monthly meeting of PGWA was held on April 2, 1996 with E. Franklin Holton, WA3ZMW presiding. The minutes Or the March meeting were read and approved and incoming correspondence with announcements were passed around.

Field Day and Club participation this year has stirred quite a bit of interest among members. Dave, WB3KXL has injected some good ideas and operating modes that we could use. Operating on portable power is one of the main issues including solar and gel cell use.

PGWA's primary function within the Prince George's County Chapter of the Red Cross Building is to act as communicators on the Amateur Radio Frequencies during emergency and disaster situations. To brush up on these practices we set up (SET) simulated emergency tests every so often. There will be one announced later.

During the last meeting, Frank, WA3ZMW brought a video tape about tornadoes how and when they form and the vast destruction that can

result where they touch down. This was very interesting to view. Frank will surprise us at the next meeting hopefully. Visitors are welcome.

73's Ken Easton N3HLY



Quarter Century Wireless Assn. Shenandoah Valley Chapter #137

Meetings: Third Wednesday of odd-numbered months, at 12:30 PM; Carper's Valley Golf Club, 1401 Millwood Pike (Route 50 East), Winchester, VA; reservations suggested.

Information: Perry F. Crabill, Jr., W3HQX; (540) 662-7526.

Mailing Address: 225 Milam Drive, Winchester, VA, 22602.

E-mail: pcrabill.visuallink.com

Seventeen members and guests attended the meeting of Chapter 137 on March 20. A social period at 12:30 PM was followed by a buffet luncheon at 1:00 PM. The meeting was conducted by President Walter Johnson, WA4HVV.

John Kanode, N4MM, reported on ARRL and FCC happenings. Virginia has a new SCM; Assistant SCM Chris Wright, KD4TZN, from Rocky Mount, has been appointed to replace Ted Dingler, N4KSO, who resigned. John has been busy with DXCC matters. The Roanoke Division Newsletter is on its way to members. The FCC has issued NOI 96-17 "In the Matter of Improving Commission Processes. This could lead to significant changes in administration of the Amateur service. Certain functions like assigning call signs and issuing licenses could be privatized.

Tony Stalls, K4KYO, called attention to the ARRL petition assigned RM-8763 requesting the FCC to extend the scope of PRB-1 regarding antenna installations. After some discussion, a motion was passed for the Chapter to go on record with the FCC in support of ARRL. Perry Crabill

was instructed to forward a letter to this effect to the Commission immediately, because the deadline for comments was March 22.

Walt Johnson said that the Chapter needs a history; none exists at present. Perry Crabill said that he could start such a document, using the minutes from previous years, but would need additional information from charter members. President Walter Johnson announced that he wished to select a member for the Chapter's Distinguished Service Award, and needed written suggestions from everyone suggesting candidates.

Perry Crabill reported that Neill Woods, W4LOG, was absent because of bronchitis. Lew Danes, W3FZT, said that Nat De Gutz, W2CXB, past president of the Chapter, was still in the Potomac Valley Nursing Home, 1235 Potomac Valley Road, Rockville, MD, 20850. His daughters visit him weekly, but Nat is despondent and shows little interest in what is going on.

For the program, each member was asked to talk about his early days as a ham, beginning with those who had been licensed the longest.

Lew Danes, W3FZT, obtained a commercial CW and phone license, along with a ham ticket in 1931. He repaired radios in his home town, and first got on the air in Alaska. He built a receiver using type 30 tubes, but burnt them out.

Fred Holt, K2EZY, became interested in radio in 1930 through a cousin who was a ham. He obtained a Class "C" license in 1932, and was on the air with a 210 Hartley oscillator running 15 watts on 40 meters and a three-tube regenerative receiver.

Charles Anderson, NF3X, was licensed in 1933, and operated on 40 and 160 meters with a 45 TNT oscillator, a receiver with two 30 tubes, and a center fed dipole.

Bob Stoner, W3MP, was licensed May 5, 1934. He built his own receiver, and ran a 45 push-pull oscillator. He was working a VK on 10 meters with

loop modulation, and lost him when the loop slipped. Bob was the first in the Third Call Area to work all DXCC.

Roy Cartier, K4AC, converted an old SW converter to a three tube regenerative receiver. Licensed in 1938, he started with a 2AS crystal rig running 2.5 watts. He called stations for two and a half days before making his first contact with New England.

Perry Crabill, W3HQX, received his license in August, 1938, after he graduated from high school. His first rig was a 47 crystal oscillator, running 3.5 watts. It took three days of calling before getting his first QSO across town.

Howard Miller, W4KXE, was licensed in January 1938. His first rig had a 56 oscillator with a Bliley crystal and a 2A5 final, using capacitors from BC sets. He bootlegged on 5 meters in high school.

John Swafford, W4HU, obtained a Class "C" license in 1940, and operated with a Sky Buddy receiver and a 6F6-6L6 rig. He said DXing in the early days was great.

Guy Black, W4PSJ, bought radio parts at Kresge's, and at the original Radio Shack in Boston; he was licensed in Chicago in 1947. His first receiver was an NC-100 he bought for \$50. He used military surplus equipment.

David Burns, WA3WHR, thinks he was licensed in 1950 and believes his first rig may have been a 6V6-6L6 lineup. He used clamp tube modulation, and worked 10 phone and 40 CW, and later went to 160 phone because 10 meters was too crowded.

Although all members present had not had their turns, the program was stopped at this point due to the lateness of the hour, to be continued at the next meeting on May 15.

Perry Crabill, W3HQX
Secretary/Treasurer



Shenandoah Valley Amateur Radio Club

Meetings: First and Third Friday of every month at 7:30 p.m. SVARC Club House 2921 Grace Street, Winchester, Virginia.

Repeater: 146.22 In/ 146.82 Out.

Net: Shenandoah Valley Emergency Net (SVEN) 7:15 daily on 146.22/146.82 Repeater.

Mailing: P.O. Box 139 Winchester, 22604.

President: Fred Wetzel (W4KRT).

Info: Irvin Barb, KD4BHV, 955-1745.

Internet home page: <http://www.w3ic.com/inet/svarc.htm>.

Spring is finally here! The SVARC certainly was busy during late April and early May.

On the weekend of April 13-14, we provided communications support to two local events. The first was the No Frills 25/50 Trail Ride. This equestrian event spanned 50 miles of trails in the Fort Valley, Virginia countryside. This event provides unique challenges for us to conquer including plenty of hills, valley's and various wildlife. Participants included: Ken "Bo" Tanner (KE4SQZ) who coordinated the event, Gary Lyon (KE4FFH), Sandy Bowen (KF4EKA), Dave Watterson (KE4SQX), Ed Nail (KE4SRB), Stan Monish (KD4HRJ), Wayne Kohler (KE4PMS), and Rick Choy (N3HXT). On Sunday, April 14, club members also supported the Muscular Dystrophy Walk. Participants for this event included: Ken "Bo" Tanner (KE4SQZ) coordinator, Tom Sullivan (KD4WSM), Ed Nail (KE4SRB), Brent McKinley (KE4SRD), Dave Watterson (KE4SQX), Stan Monish (KD4HRJ), Eric King (KE4SRF) and Bill Moreau (KE4SVA). Thanks so much for pitching in!

At our April 12th meeting, guest speaker George Saunders (KR4MU) presented an informational talk on traffic handling. Since many of our members are fairly new to handling traffic, this was a timely topic. Thanks George, for making

the trip all the way out to the valley from Arlington! Another exercise, Operation Scramble, was held on May 11. Hams throughout the counties of Frederick, Clarke, Warren and Shenandoah held an event similar to the ARRL's Field Day. The goal was to operate all modes emergency power to assess communications capabilities throughout the valley. SVARC President, Fred Wetzel played a large part in coordinating this event.



Southern Maryland Amateur Radio Club

Meetings: 2nd Friday of each month at 1930 ET at the PG County Police, Clinton Station, 6707 Groverton Drive, Clinton, Maryland.

Nets: Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (+/-QRM); Thursday at 2000 on 28.447 USB.

Repeater: WA3YUV/R 147.15+, Cheltenham, Md. Autopatch to 911.

Mailing Address: P.O. Box 273, Cheltenham, Md, 20623

Information: Vic (WA3YUV) & Linda (KA3VNI), (301) 888-1388

Are you ready for the next trick Mother Nature is going to pull on us? The weather for the past few months has been extraordinary at best, even for Washington. This is a good time to check out your emergency operations capability and your personal preparations for you and your family. Don't forget to start that generator up occasionally.

Speaking of generators, Field Day is almost upon us. SMARC will be setting up a club station at Cedarville State Park. We plan to operate all modes and welcome all members to this event. Many surprises are planned to make this event enjoyable to everyone.

In April Vic, WA3YUV, started a special Amateur radio training class. This class was focused on encouraging younger folks to join the

hobby by conducting a novice/technician program just for them. We wish the twelve young people that started the course great success in their preparation for a lifelong adventure in radio communications.

April was a busy time for SMARC public service activities. On Saturday, April 27th SMARC participated in the Prince George's County Christmas in April program. This very worthwhile nationwide project assists folks less fortunate than ourselves by doing much needed home repairs, all of which needs our help in coordinating their efforts. Our appreciation is extended to George, KA3KIF, for his tireless efforts coordinating SMARC's successful participation in this project. The next day, Sunday, April 28th SMARC helped at the annual March of Dimes Walk-a-Thon at the Benjamin Stoddert Middle School in Waldorf. Our thanks to Dan, N3RUA, for his efforts coordinating this event.

If you have finally returned from your trip south for the winter you will find that the repeater is back on the air, better than ever. Even though the antenna is not quite as far up in the air as it originally was, its performance at the new site rivals its former location. As you probably noticed we are still having some problems with crackling noises on the repeater from time to time. It seems to be worse when the wind blows, making the old four bay antenna suspect. Mike, N3RWF, who can't seem to get enough of climbing that tower, has volunteered to bring the antenna down to get it rehabilitated when he goes up to install the antenna for the new SMARC 440 repeater. Yes, we are very close to having an operational 440 machine on the air.

Just a reminder that your annual dues should be in to the post office box before the end of July. Your continued support will help keep the improvements to the repeater coming as well as the new features like remote two meter sites and the 440 machine.

Now that daylight lasts much longer, get out and join the rest of the members at our monthly

meetings. Enjoy the game of "Match the face to the voice"!! And that is the big news from southern Maryland. Be careful in all your summertime activities, and we will see you next month.

73, Greg - WA3FSC



The Middle Atlantic FM and Repeater Council, Inc.

Meetings: Coordinating Committee (CC) normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue. Talk-in on 147.18.

Address: P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

As I reported previously, formation of a national council of Amateur frequency coordinators (to be known as the National Frequency Coordinator's Council - NFCC) is progressing well. A set of By-Laws and Articles of Incorporation, drafted by a "drafting committee" (chaired by our own T-MARC President, Owen Wormser, K6LEW) which was selected at the coordinator's conference in St. Louis last October, have been approved by the nation's coordinators. The processes of incorporating and drafting candidates for election to the first formal Board of Directors are in the works. A proposed "Memorandum of Understanding" to establish a formal relationship with the ARRL will be sent to the League in time to be addressed at their next Board meeting.

There was a last-minute addition of a "Frequency Coordination" forum to the schedule at the Dayton Hamvention. Details next month.

The 145.27 repeater near Fredericksburg, Va., was re-coordinated to a new site. Additionally, the 442.000 repeater in that area which was moved to a new site to the west of the original location, was

re-coordinated at the new site but on 442.150. This frequency change was necessary in order to avoid cochannel problems with the Winchester, Va., 442.000 machine. A couple of new UHF links were coordinated in Northern Va. for an existing repeater.

The T-MARC "repeater activity scanner", which has been in operation for several years, is now also looking at the activity level on the 2-Meter simplex and packet channels. The main purpose is to determine what the activity level is on the packet channels, and how this compares with other activity levels throughout the 2-Meter band. We are working with DMARC, our area packet organization, to refine the band plans for this area's VHF and UHF packet operators. If you have any suggestions for improvements to the packet band plans, drop a note to T-MARC or DMARC. Thanks!

73, Gary, W3DTN, T-MARC PIO



Valley Amateur Television Society

Meetings: V.A.T.S. Meets the 2nd Thursday of each month. Time: 7:30 PM. Place - Amateur Radio of Hagerstown, 17561 York Road, Hagerstown, MD.

Officers: President-Joe Lockbaum, WA3PTV. V. President-Bill Drager, K3UMV. Secretary/Treasurer - Tim Keener N3VGS.

Information: Contact any club officer.

The 1996 National Electrical Code now has new ARTICLE 810 COVERING AMATEUR RADIO! Here are highlights of the topics in the new article:

810-4 Covers Radio Interference Eliminators and Noise Suppressers. 810-11 Describes acceptable antennas and lead-in conductors for receiving antennas. 810-12 Details how and where aerials may be attached to poles.

810-13 Describes passages of aials near power lines. 810-16 Specifies minimum sizes of receiving antenna wire versus length. 810-18 Refers to clearances for lead-in conductors. 810-20 References Antenna Discharge Units for receiving antennas. 810-21 Details grounding conductors and connectors for receiving stations. 810-52 Shows minimum wire sizes for amateur transmitting and receiving stations. 810-53 Details size requirements for lead-in conductors. 810-54 Describes antenna clearances from buildings. 810-55 Tells how lead-ins shall enter buildings. 810-57 Talks about Antenna Discharge Units for Transmitting Stations. 810-58 Describes grounding conductors for Amateur Stations. 810-70 Requirements for interior installations for wiring of amateur stations. 810-71 Requirements for Enclosing Transmitters, Grounding Inside, and when interlocks are required for transmitting equipment.



Vienna Wireless Society

Meeting: 7:30pm second and fourth Fridays of the month at the Vienna Community Center.
Nets: Pow-Wow nightly at 9 pm. on 28.444 MHz Slow speed code, nightly 8:30 pm on 28.390 MHz. Vienna Emergency Net, Wednesday 7:30 pm 146.085/146.685
Repeater: K4HTA 146.085 in/146.685 out
Information: Paul, AB4CY, (703) 560-2779
Mailing: P.O. Box 418 Vienna, VA. 22183

The fox turned out to be unusually wiley for our April foxhunt. He ran unattended by remote computer control from a J-pole up in a tree so there were no visual clues like empty coke cans. Everybody looking for the fox had much too sensitive receivers, a field strength meter would have been better for the close-in work when within a few hundred feet of the den. Bernie, K4XY, was the fox and Mike, KA4BSZ, luckily "stumbled" over the fox as much as much as detected the lair. The rest of us weren't that successful.

There were three rigs set up in Glyndon Park for the QRP Field Day contest. The hotdog lunch seemed to inspire a flurry of activity. There were four operators and about a dozen visitors to the site to observe the goings on. It's amazing how many states you can rack up on 5 watts or less. One MI contact was running a quarter of a watt. Jerry, KD4PUP, brought along his pop-up trailer that he uses to operate QRP on his runs to Texas to visit his dad, W5BEQ. All the comforts of home, and a great place for a hot cup of tea.

Two of our members, Ben, W4FQT, and Brian, N1KCE, have been certified for 5-Band DXCC. There are a few others who aren't far behind, just waiting for the mailman. Not bad for these days of the Sun spot doldrums.

Tom Gooding, K4LHB, dropped by to present a nice program at our second meeting in April on VHF propagation beyond line of sight. Field Day plans are well along with the usual hassle over the desire to go for points or participation. The number of good CW Ops available seems to be shrinking as time goes on, but we always have a terrific time.

73's Paul, AB4CY



Waldorf Repeater Support Group, Inc.

Meetings: Board of Directors, Monthly. Membership, Informally, as needed.

Repeater: 145.35 MHz

Information Recording: (301) 843-1420

Membership: P.O. Box 1774; White Plains, MD 20695.

FAR Trustees (& for Information): Chris O'Brien KA3TQD (301) 888-1100, Chip Fetrow N4QFW (703) 406-3130.

Nets: Potomac River Two-Meter Net, Thursdays at 8:00 pm. Maryland REACT, First Sunday of each month at 8:00 pm. Skywarn, as called up, has priority over all other traffic.

We have obtained a club call sign, KB3BOI. This does not change anything other than the call sign. The new club call sign does not mean we are now a full service club, as always we just run this, the Waldorf, MD, 145.34 MHz repeater. This does not mean Chris, KA3TQD, has changed his involvement. Chris continues to be involved with the repeater, as are others, but we are no longer using his call sign.

Although some have suggested on the air that the new club call sign means we are going to start a full service club, this could not be further from the truth. For over 5 years, Chip, N4QFW, and Chris have wished a repeater call sign could be obtained. Repeater call signs were not available, nor were club call signs. This has caused problems with people calling the repeater "Chris' Repeater". While it is true that Chris was extremely instrumental in getting the repeater on the air, it is not solely "his" repeater.

Now, with the vanity call sign system starting, we were hoping to get a club call sign and then not use it until we could change it to something we really wanted. Now it looks like the vanity call sign system is years away, or might even not happen because of all of the protests filed at the FCC by many, many hams. The FCC must act on each of these protests before starting to issue vanity call signs. With the implementation of the Communications Act of 1996, the FCC is way too

busy to be worrying about hams. Once the FCC acts on the objections, it is very likely that the clubs or individual hams may take their specific issues to court.. Because these few hams want the FCC to issue the vanity calls their way, we may never see the program at all. (See the FCC column in the May *AutoCall* for more information.)

We decided not to wait and use our new club call sign until we can get one we really like, if that is ever possible. We would like to have W3XTR or even better WR3XTR. If we use an extra class trustee, we might even like to have something short like WR3W or WR3X or WR3R, but this will likely never happen.

We Wish we had the time to start a full service club. Alas, we do not even have enough time to run the repeater the way we would like it to be run. We understand that there is a quiet movement to start a Waldorf Club. We all hope this happens and that it is very successful. If a club is formed, we will offer the use of the repeater to the club, just like we do for the informal *Potomac River Net*. Here is some good news! Chris bought an exciter, which is a low powered FM transmitter, to drive the Henry amplifier. The crew, which lately consists of Chip Fetrow, N4QFW, Bob Denny, N3QYP, Fee Lee N3KRA, Ron Peter, KD4UUH, and Mike Tackish, KA3GRW, installed the exciter and put the Henry Amplifier on the air. This set up got us back to our full 903 watts.

KE4TZ

DAVE PHILLIPS
FORD SALES



SHEEHY FORD OF SPRINGFIELD, INC.

6727 Loisdale Road
Springfield, Virginia 22150
(703) 922-2240
(703) 922-2217 Fax



EX WA3HNW WB4NZE

Additionally, Fee Lee, N3KRA spent quite a bit of time getting the Short Hills Mountain remote receiver ready to go. It is now on the air and hearing people all over the place. It normally votes Chris when he is at work in College Park! This site is going to be killer for us. We have the two remote receivers in operation, plus the main site, and they are working fairly well. The Northwest Wash., DC remote receiver requires PL 5A, which is 156.7 Hz. Once we work out some problems, this site will be returned to carrier squelch.

The use of PL is not to "cover up" an interference problem at DC site. Some people end up being hard to understand when encoding PL (using all of the sites). If the person you are talking to says you are noisy or switching often, turn off your PL encoder to prevent switching back and forth between the one of the other sites and DC. If you are in DC, Arlington, or southern Montgomery County inside the beltway, encode PL 5A so you can get into the DC site, otherwise it is probably better to leave it off. We still have some work to finish up on the voting.

Right now, you can hear the voter switch between receive sites. That is going to be fixed. The reason you can hear the switching is because of the different frequency responses of the different receivers, link transmitters and link receivers. We

are going to make them all have the same frequency response which will help two things. First you will not be able to hear the voter switch between sites. Second, fixing the frequency response will keep the voter from choosing the incorrect site. This will be worked on after the Dayton Hamvention. Once this is all corrected, your best bet will be to encode PL at all times. This situation is temporary.

We are making great progress improving the repeater and the operation of the repeater for our members. If you are not currently a member, please consider joining and helping support the repeater. If you are already a member, thank you for your support. It is sincerely appreciated.

Speaking of the support group, we are setting up a new corporation. The new corporation will be a tax exempt charitable IRS part 501(c)(3) corporation. This will mean your future donations will be tax deductible. We will have our determination back by mid May. We will let you know when our new status becomes effective.

The nets remain on the repeater. The informal *Potomac River Net* remains on Thursday nights at 8:00 p.m. The *Maryland REACT net* is the first Sunday of the month at 8:00 p.m. and they welcome Virginia REACT members to check in. Skywarn always has priority and will be called as needed.

Silent Key Estate Sale

THE FOLLOWING ITEMS ARE FROM THE ESTATE OF A SILENT KEY.
ALL ITEMS IN NEW TO EXCELLENT CONDITION.

1FT-990 YAESU HF TRANSCEIVER W/MANUAL	1400.00
RS-50M ASTRON POWER SUPPLY	180.00
DAIWA SWR/PWR METER 140/525MHz METER	45.00
2/70G RF CONCEPTS 30/20W DUAL BAND AMP	150.00
14-310 RF CONCEPTS 100W 440MHZ AMP	200.00
1BRASS RACER IAMBIC VIBROPLEX KEYER	60.00
1SP-200 GROVE SOUND ENHANCER	150.00
1PK-96 AEA PACKET CONTROLLER	110.00
1DM-1 AEA 2M/220/440 FM DEVIATION METER	120.00

FOR INFORMATION CALL GEORGE SAUNDERS, KR4MU. PHONE 703-538-4959



SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of *Auto-Call* at the rate of 5 cents per word with a **\$2.00 minimum**. Commercial vendors and non-subscriber rate is 17 cents per word with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

Estate sales for Widows assistance handled by a FAR club will be published without cost.

Your full name and address must be provided with each ad but need not be published. No ads will be accepted over

the telephone and all ads must be prepaid. Ads that will be running for longer than 1 month must be accompanied by a letter stating the length that the ad is to be run. Since no effort is made to investigate advertisers, no warranty can be implied. Copy **MUST** be received by the 1st day of the month prior to the month of publication. Send all commercial and non-commercial advertising and Shack Sales to:

John Queen, Auto-Call Editor
755 Woodland Way, Owings, MD 20736
(301) 855-0198

FOR SALE: 450 Plus TV tubes NIB with RCA tube rack, \$200.00. Pick-up only. Phone (540) 338-4152. K4LJH. Charles T. Preston, 48 N. Ivandale St., Hamilton, VA 22068. [07/96]

WANTED: For museum - pre 1980 microcomputers - also wanted early sales and microcomputer magazines. KK4WW. (540) 231-6478. P.O. Box 341, Floyd, VA 24091. [03/97]

FOR SALE: Henry 8K amplifier (hf) very nice condition \$4,500.00. KK4WW. P.O. Box 341, Floyd, VA 24091. (540) 231-6478. [08/96]

FOR SALE: R-4 vertical 20, 15, 10 & 12 M. Excellent condition. Used only 2 years. Make offer. Call George for good price. Work (703) 519-3400, ext. 190. Home (703) 754-2752. [06/96]

FOR SALE: Kenwood TS 940, (high serial number) with CW filter, excellent condition, \$975.00 obo. Ameritron AL-811 600 watt linear amplifier, new, \$550.00 firm. VCI Vechtronics 1500 watt antenna tuner, new, \$325.00 firm. Carl, W4ACM, (703) 360-4373. [06/96]

FOR SALE: AEA IsoLoop 10-30 HF antenna with LC-2 loop controller, manual. Used indoors. Must provide own feedline. \$100, buyer pick-up only. Charles Kahn, N3JGB, Clinton, MD. (301) 868-7120. [06/96]

FOR SALE: Cushcraft tribander beam. 3 el 10, 15, 20 M in very good condition. Used only 2 years. Call George for good price. Work (703) 519-3400, ext. 190. Home (703) 754-2752. [06/96]

REMINDER !!

All Shack Sales ads must be received no later than the 1st day of the month prior to the month of publication.

All ads must be paid in advance.

No Shack Sales Ads will be accepted over the telephone.

Mid-Atlantic Radio Club. Become a part of one of the country's fastest growing vintage radio clubs. The Mid-Atlantic Antique Radio Club is an active group of radio collectors, restorers and historians. For a sample newsletter, write to Jay Kiessling, Mid-Atlantic Antique Radio Club, P.O. Box 67, Upperco, MD 21155. (410) 239-1818.

[SWP]

AMATEUR RADIO NEWS SERVICE is an organization of publishers and editors of Amateur Radio newsletters and members engaged in public relations. Its purpose is to assist editors in any way possible. For information, write to Lee Knirko, W9MOL, Amateur Radio News Service, 833 Park Plaine, Parke Ridge, IL 60067.

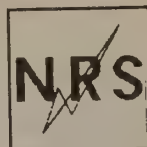
[SWP]



Reminder - all submissions for

AUTO CALL

are due no later than the 1st of the month prior to the month of publication!!



NORM'S ROTOR SERVICE

5263 Agro Drive
Frederick, MD 21703
(301) 874-5885

We Rebuild Rotors

Plus:

- Rebuilt Rotors for Sale - Parts for U.S. Built Rotors
- We Buy Used U.S. Rotors/Controls for CASH!

NORM JEWELER K3LYW

MAHLON LOOMIS INVENTOR OF RADIO

By Thomas Appleby
Second Printing

Available From
**SVANHOLM RESEARCH
LABORATORIES**

P.O. Box 81
Washington, D.C. 20044
Please Send \$25.00 Donation
With \$5.00 for S & H

[5/96]

SHACK SALES & COMMERCIAL ADVERTISING

Deadline for copy is the 1st of the month preceding the publication date. Shack sales will NOT be accepted over the telephone. Full address must be provide for our reference but need not be published. Each ad must include the full name of the advertiser. Each word, abbreviation, model number or group of letter/numbers is counted as one word. The entire telephone number - including city, state and zip code is counted as only one word. Remittance for all Shack Sales must accompany each ad.

Noncommercial Shack Sale advertising of amateur associated equipment is available to subscribers of Auto Call at 5¢ per word - with a \$2.00 Minimum. Commercial Vendors and nonsubscribers rate is 17¢ per word with a \$5.50 minimum.

Special Headings or special spacing may be used (e.g., one item per line) but such ads are charged at a column inch rate - \$1.00 per inch for noncommercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Commercial vendors should include the ad size and length of run (e.g. 1 year, 6 times, etc.) on company letterhead

and it must be signed by the person authorizing payment for the ad. Full name and address must be provided with each ad but need not be published. Payment should be included when the ad is submitted for publication. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

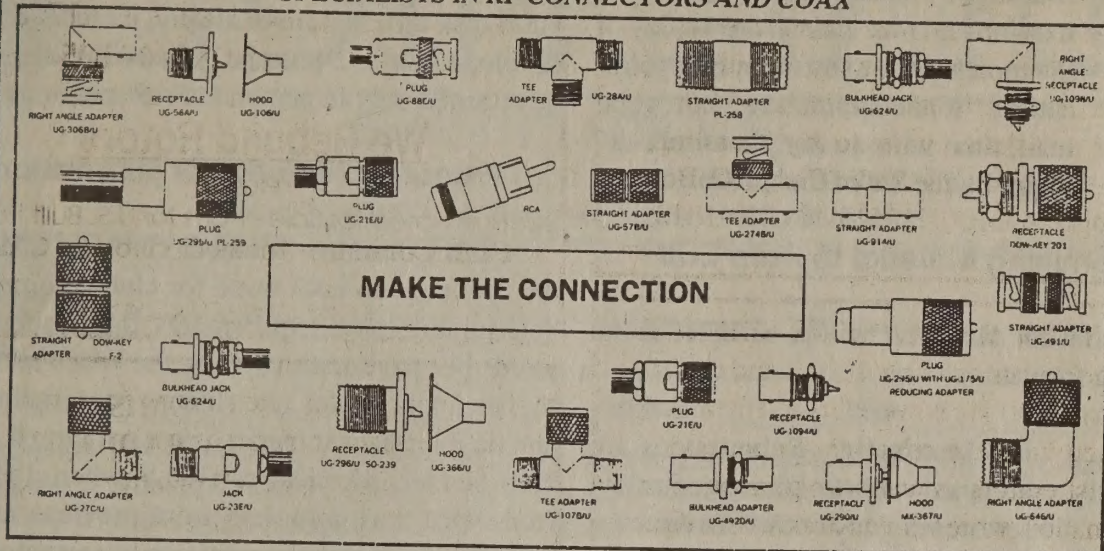
DISPLAY ADS are "Boxed" and may contain artwork or photographs. Requests for specific placement in the magazine will be honored if practical but cannot be guaranteed. Display ads are charges according to size as shown below, based on camera ready copy. All advertising must be prepaid for at least the current month.

Rates Per Issue

Ad Size	1 Year	6 Times	3 Times	1 Time
Full	\$75.00	\$90.00	\$100.00	\$105.00
1/2	55.00	65.00	71.00	75.00
1/3	40.00	46.00	51.00	54.00
1/4	33.00	38.00	41.00	43.00
1/6	22.00	26.00	28.00	30.00
1/8	17.00	20.00	22.00	23.00

The R.F. Connection

"SPECIALISTS IN RF CONNECTORS AND COAX"



MAKE THE CONNECTION

The R.F. Connection

213 N. Frederick Ave., Suite 11, Gaithersburg, MD. 20877
301-840-5477

280

JWO SERVICES

Discounts on All!

ARRL, AMECO, RSGB, CALLBOOK, W5YI, CQ, G. WEST, etc. Ham related books; software and video tapes — all at a discount! INSTRUCTORS, order all of your needs from JWO SERVICES — we take back all unused materials! New! 1996-1997 ARRL REPEATER DIRECTORY. (List \$8.00). Only \$7.30. 10-up \$6.80.

New! 1996-1997 REPEATER MAPBOOK by ArtSci. (List \$10.00). Only \$9.15. 10-up \$8.55.

New! EXTRA CLASS MANUAL (ARRL) Effective July, 1996! (List \$12) Only \$11.00. 10-up \$10.20.

PRACTICAL PACKET RADIO (ARRL) Net/ROMs, cluster, wormholes, ARPS, packet in space, etc. (List \$15.95) Only \$14.65. HAM RADIO MADE EASY (ARRL) Includes repeaters, packet, SSB, CW, satellites, ATV, HF voice, etc. (List \$16) Only \$14.65. YOUR MOBILE COMPANION (ARRL) Cars, motorcycles, boats, etc., (List \$12) Only \$11.00. ARRL FCC RULEBOOK (List \$12) \$11.00; 10-up \$10.25. 1996 ARRL HANDBOOK (List \$38) 1-9 \$34.50, call for special 10-up prices. 1996 CALLBOOK CD-ROM Includes both North American and International listings plus much more! (List \$50.00) Only \$39.00. 1996 CALLBOOKS Your choice, North American or International (List \$35.00 each) Only \$28.00 each or \$54.00 per pair. January 1996 QRZ! HAM RADIO CD ROM call listing. Very popular and easy to use! (List \$29.95) Only \$18.00. Are you on Internet?

Got any questions? Leave a message for John, W3IS at Internet address johnw3is@aol.com.

Only \$0.40 handling per order plus shipping.

Excellent prices on study guides for clubs
and classes!

JWO SERVICES

Catalog of Savings - FREE!

Our 10th year of excellent service
around the world!

JWO SERVICES

John W. Obradovich, W3IS

12 Hickory Place, Camp Hill, PA 17011

Phone: (717) 731-4747

Worldwide Shipments.



Auto Call Production Policy



Deadline: The deadline for ALL submissions to *Auto Call* is the 1st day of the month prior to the month of publication. When submitting via regular mail, time your mailing to ensure delivery by the 1st of the month.

Submitting Material to *Auto Call*

Submissions for *Auto Call* will be accepted in the following formats:



Electronically: Submissions are accepted via any of the major on line services directly or over the Internet.

Use the applicable format exactly as follows:

America On Line - JohnQueen

AppleLink - johnqueen@aol.com@internet#

BitNet - johnqueen@aol.com@cunyv

CompuServe - INTERNET:johnqueen@aol.com

Connect - johnqueen@aol.com

Delphi - internet"johnqueen@aol.com"

FidoNet - To johnqueen@aol.com<CR><CR>

GEnie - johnqueen@aol.com@inet#

MCI Mail - mbx: johnqueen@aol.com

Prodigy - johnqueen@aol.com



Regular Mail: Mail typewritten or computer generated hard copy to: John Queen, Editor, *Auto Call* Magazine, 755 Woodland Way, Owings, MD 20736. Ensure that

your printed material is dark enough for scanning.



Computer Disk: Submissions are accepted on 3.5" or 5.25" computer disk, in either Macintosh or MS-DOS format, using Word, WordPerfect, or standard ASCII text files. Write your name, telephone number, and club name on the disk. Submit graphic files (club logos, etc) in an EPS or TIFF format. Please verify the readability of your com-

puter files before sending. If you want your computer disk returned immediately, include a SASE envelope with .32 postage. Otherwise, disks will be returned only in person at FAR meetings.

Preparing Material for Submission

Club Columns: Member clubs are allocated one full page in each issue for club columns. In determining space requirements, figure about 700 words per page not including the space taken up by headings, photos, etc. Indent paragraphs .25" and double space to begin a new paragraph. Send club header information ONLY when different from what was published from previous month. The editor reserves the right to edit any submitted material for space, content and/or applicability.

Hamfests/Events: Member clubs are allocated one full page per year to promote one club sponsored hamfest, convention, or special event. Submit clean black & white camera ready copy only by mail. Master copy should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary. Electronic submissions of Hamfest ads will not be accepted.

Photographs: The editor will select the best photograph submitted for the cover each month. Photographs should depict club members, club stations, or amateur radio related events that are current and noteworthy. Clubs may also submit photographs for inclusion with their club column. Photographs will be used in columns when space permits. Either B&W or color photos can be used. For each photograph submitted, write your name, phone number, and club name, along with a description of the photograph on a piece of paper, and tape it on the back of the photograph. Do not write on the back of your photo. If you want your photos returned immediately, include a SASE envelope with sufficient postage. Otherwise, photos will be returned only in person at FAR meetings.



JOIN ARRL!

BENEFITS FOR YOU . . .

QST, QSL Bureau Awards, Low Cost Insurance, Operating Aids,
Government Liason and more - - Much More!

MEMBERSHIP APPLICATION

AUTO-CALL

Name: _____ Call: _____

Address: _____

City: _____ State: _____ Zip: _____

\$30 in U.S. \$42 elsewhere (U.S. funds). Individuals age 65 and over, upon submitting one-time proof of age, may request special dues rate of \$24 in the U.S. \$36 elsewhere in U.S. funds. Persons age 21 and younger may qualify for special rates, write for application. For postal purposes, fifty percent of dues is allocated to QST, the balance for membership.

Visa, MC, AMEX, Discover #: _____

Signature: _____ Expires: _____

Atlantic Division Director
Hugh Turnbull, W3ABC
6903 Rhode Island Avenue
College Park, MD 20740
Phone: (301) 927-1797

The American Radio Relay League
225 Main St.
Newington, CT. 06111 USA

Roanoke Division Director
John Kanode, N4MM
Rt. 1, Box 73-A
Boyce, VA 22620
Phone: (703) 837-1340



Magazine Subscription Form

Please enter my subscription to Auto-Call: ☐ New ☐ Renewal ☐ Gift

For ☐ 1 year ☐ 2 years. Subscription rate is only **\$8.00** per year. (You may also order a sample copy of the most recent issue for just \$1.00 which will be applied to your subscription).

Name: _____ Call: _____

Address: _____

City: _____ State: _____ Zip: _____

**Make check payable to the Foundation
For Amateur Radio and mail form to:**

P.O. Box 7612
Falls Church, VA
22040-7612

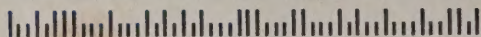
Area Club Meetings - June 1996

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Remember. Field Day takes place in a field near you during the last weekend of June!						1
2	3 DOSARC	4 Antietam PG Wireless	5 BARC Montgomery	6 Anne Arundel	7 Mobileers Shenandoah	8 Green Mtn.
9 Metro Comm.	10 Carroll Co.	11 Fauquier Frederick Woodbridge	12 FAR - MD	13 MADRAS Mid-Atlantic Mt. Vernon	14 VOA Vienna So. Maryland Alexandria	15 North Point
16	17 OVHA Sterling Park	18 Antietam Arlington	19 BARC Goodard HEMARC Montgomery	20 Anne Arundel	21 Shenandoah	22 Capital City QCWA 91 NCDXA
23/30 Adventist	24 Green Mtn. T-MARC	25 Columbia	26 Moose Laurel Carroll Co.	27 MADRAS St. Mary's	28 Central MD Vienna	29



P.O. Box 7612
Falls Church, VA
22040-7612

Nonprofit Organization
U.S. Postage Paid
Arlington, VA 22210
Permit #757



96/09 02649

ALFRED A LAUN III K3ZO

PO BOX 97

TEMPLE HILLS MD 20757-0097

Address Correction Requested